

Maritime Security, Seapower, and Trade

EMC Chair Symposium



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Papers*

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WELCOME FROM THE EMC CHAIR

Dr. Derek S. Reveron
U.S. Naval War College

To make sense of the relationship among maritime security, seapower, and trade, the EMC Chair will convene a symposium for experts from industry, the policy community, and the sea services. Participants are asked to reflect on the importance of classic maritime thought and how changes in the shipping industry, trade patterns, and non-state use of the oceans impact future naval operations. The implications are important for understanding the types of missions combatant commanders will execute and the types of equipment and training the Navy must provide to support these missions. Keynote speakers will address the diplomatic and operational considerations of maritime cooperation to include the challenge of maritime security sector reform.

The succeeding pages contain the working papers participants prepared in advance of the symposium. The five panels are:

- ♦ **Panel 1 – Reflections on Maritime Strategy:** How do foundational theories of sea power influence maritime strategies of maritime countries of today?

Warfare has changed, yet the classics of strategic thought endure. From the triremes and hoplites of ancient Greece to the Special Forces in 21st-century Philippines, strategy is the process by which political objectives are translated into military action—using the means at a nation’s disposal to compel an enemy to bend to its political will. Whether it is Mahan’s ideas about global basing or Corbett’s thinking on integrated operations, key thinkers such as these have had profound impacts on the world’s navies during the 20th century. At the same time, rising maritime powers look to the classics that led to the development of modern navies. This panel examines the foundational theories of seapower that influenced the maritime strategies of the great powers of the 20th century and considers the relevance of these theories for the maritime strategies of China, India and the United States in the 21st century.

- ♦ **Panel 2 – The Evolving Role of Seapower in Peacetime:** What are the proper objectives and methods of naval operations in peacetime today, and what are the implications for naval theory, strategy, doctrine, and force structure?

The historical peacetime role of seapower—protecting a nation’s trade at sea—seems to have lost much of its relevance in contemporary times. Nonetheless, the increasingly globalized economy is vitally dependent on efficient, uninterrupted maritime commerce which can be placed at risk by a growing spectrum of threats. At the same time, today’s navies are being tasked with such missions as humanitarian relief, countering trans-national crime and terrorism, and combating piracy, often without appropriate strategy, doctrine or optimal platforms. This panel will look at the evolving role of seapower and answer this question: What are the proper objectives and methods of naval operations in peacetime today, and what are the implications for naval theory, strategy, doctrine, and force structure?

- ♦ **Panel 3 – Naval Strategists’ Perspectives:** How can maritime power be regionally applied?

In 2013, the Naval War College created Advanced Studies in Naval Strategy. This course of study builds on the broad graduate-level educational base of the core curriculum to instill a profound understanding of the strategic uses of seapower, the role of economics in strategy, and acquired knowledge from history and the social sciences on issues of vital interest to the Navy. Three students enrolled in the elective will present initial findings for their research that will inform future maritime strategic thinking.

- ♦ **Panel 4 – Shrinking Ice Caps, Shorter Sea Routes, and Trade:** How does Arctic shipping create new challenges for preserving access and naval operations?

Shrinking sea ice is creating access to shorter sea routes. In order to develop maritime strategy and field relevant capabilities in the Arctic, it is important to understand the strategic challenges and commercial opportunities likely to emerge over the next several decades. This panel brings together commercial industry experts from China, Russia, and the U.S. to explore the economic viability of a melting Arctic as a major pathway for global commerce. Additionally, it considers how Arctic shipping creates new challenges for preserving access and naval operations.

- ♦ **Panel 5 – NGOs in the Maritime Domain:** How are non-state actors influencing the maritime domain and interact with state actors?

NGOs, protest movements, and other "cause"-drive groups are not often thought of acting in the maritime commons. Yet in recent years, groups have increasingly taken their causes to sea, ranging from the "Gaza Flotilla" and Israel, to Sea Shepherd's interference with Japanese whaling ships, or African and Latin American states deputizing NGOs for marine resource protection. As technology continues to empower non-state actors, it will be important to understand their maritime activities and the challenges and opportunities they present. This panel will examine issues including likely maritime areas of interest for non-state actors, cases of maritime operations undertaken by non-state actors, and nation state reactions, both partnerships to pursue mutual goals and responses to non-state actors working against state interests.

This symposium in part fulfills the mission of the EMC Chair to support the Navy's efforts to develop thinking about maritime security. Additional materials can be found at www.usnwc.edu/Academics/Faculty/Derek-Reveron/Workshops/EMC-Informationist-Chair.aspx

Events like these are possible through the generosity of the Naval War College Foundation and the commitment to academic excellence by the Naval War College.

KEYNOTE ADDRESS

REFLECTIONS ON MARITIME STRATEGY

Mr. Thomas Kelly
U.S. Department of State

For the past year, I have had the honor of serving as the Acting Assistant Secretary in the Bureau of Political Military Affairs. We are the connective tissue between the Departments of State and Defense. In this job I have traveled from South America to South East Asia, working to strengthen America's ties with our partners and allies, overseeing areas from Foreign Military Financing to fighting pirates. Maritime security is an important part of my work.

The theories of Alfred Thayer Mahan were instrumental in making the United States a world sea power. He redefined maritime security as protecting our coastline and sea lanes as a way to connect the United States to all of its global trading partners. Analysts estimate up to 90 per-cent of the world's commerce travels by sea.

Today, we need to expand our notion of Maritime Security. Navies are important but cannot guarantee security from all threats. In Japan and the Philippines, tsunamis and typhoons smashed vessels and land-based infrastructure, badly damaging the environment and local economies.

Climate change is affecting the Arctic. As the ice cap shrinks, old shipping lanes are expanding and, in some cases, new ones may open. This may affect world commerce, and by making the area's resources more accessible, raise the stakes on Arctic territorial disputes.

Off Africa, man-made problems affect maritime security. The battle against piracy off the coast of Somalia taught us that functioning governments are essential to stopping pirates before they can head out to sea. Piracy emanating from Somalia represented a perfect storm for the international community – a weak state in a strategically essential location, harboring a rapidly growing transnational criminal enterprise that threatened a vital artery of the global economy and the U.S. led multilateral response is on the of the great diplomatic and military success stories of this young century.

The Bureau of Political Military Affairs at the Department of State is deeply involved in the fight against piracy and has the lead in our agency on issues of maritime security. Our office working on the issues of Counter Piracy and Maritime Security has the expertise of two former Navy Captains who know the military side of things; it has two Foreign Service Offices, who are familiar with the political and diplomatic side of things. For good measure it has an active duty Coast Guard Captain in the mix.

Aside from leading the U.S. efforts to battle piracy off the coast of Somalia, Pol-Mil worked closely with our interagency and European partners to develop a Maritime Security Sector Reform guide.

The MSSR Guide, as we call it, illuminates the interdependency of the Maritime, Criminal Justice, Civil Justice and Commercial sectors and identifies the functions that any government must perform in order to deliver what its citizens might recognize as maritime security.

Maritime security has been a central issue in our rebalance to the Asia-Pacific, whose waters include many of the world's most heavily travelled trade and energy routes. 21st century global capitalism cannot function unless these sea lanes remain open and secure. Our \$555 billion in exports to the region last year supported an estimated 2.8 million jobs here in America. The security and prosperity of the United States are inextricably linked to the peaceful development of the Asia-Pacific, including in the maritime domain.

An example of our commitment to strengthen maritime capacities in Southeast Asia was a decision to provide \$40 million to the Philippines in new regional and bilateral assistance to advance maritime security capacity building. Part of that security, as Secretary Kerry said, is to help the Philippines “protect its territorial waters amid rising tensions with China.” While we want the Philippines to be able to protect its interests, diplomacy is still our method of choice, as the Secretary suggested all the nations involved in the dispute should “lower the intensity.”

That \$40 million going to the Philippines is from the Global Security Contingency Fund. Through the GSCF we can address emerging challenges in partners' security sectors and do so in a way that can bring the breadth of the U.S. Government's capabilities to bear on a problem.

In short, this fund serves as a new business model, emphasizing collaboration and the interrelated nature of defense, diplomacy and development. It is a tool we can use to help build maritime security capacity in our partners.

GSCF money is a prudent investment in the maritime security of the future. With the GSCF and other funding programs, we are helping our partners build their capacity to protect themselves, which means we should not have to send our fighting forces to those locations in the future.

Even as we expand the definition of maritime security, Alfred Thayer Mahan's theories still hold: Global maritime security will remain an essential element of American security and prosperity.

No doubt this year will bring new maritime challenges, and the Departments of State and Defense stand together, ready to meet them.

KEYNOTE ADDRESS

FROM RUM TO COCAINE, STATES LOSE LONG WAR AGAINST SMUGGLING

Dr. Peter Andreas
Brown University

The agents moved in to seize the illicit shipment, but the traffickers turned on them, shooting the senior officer and destroying his vehicle. With the local courts hopelessly compromised and corrupt, the outraged authorities wanted to extradite the perpetrators. But this only made them more defiant and violent, and they were never caught or prosecuted.

This may sound like Tijuana or Juarez in recent years, but the year was 1772, and the place was near Providence, Rhode Island. The ringleader of the attack, John Brown -- a prominent local merchant whose business interests included smuggling and slave trading -- helped found the university that bears his name (and happens to be my employer).

The famous incident came to be known as the Gaspee Affair, in which a British customs vessel, the HMS Gaspee, was stormed, looted and torched late at night by an armed group of local citizens in retaliation for cracking down on their illicit trade (though exactly what cargo they were smuggling was never determined).

Today, local residents proudly point to this historical episode as Rhode Island's opening salvo in sparking the American Revolution. A plaque on South Main Street near downtown Providence commemorates the event. Gaspee Street is a few blocks away. Of course, most Americans no longer have such a sanguine view of illicit trade, and law-enforcement officials, like the British imperial authorities before them, are increasingly preoccupied with fighting it.

Drug War

Which brings us to Mexico and President Felipe Calderon's crackdown on drug trafficking. At first glance, Mexico's deteriorating situation (some 50,000 drug-war-related deaths since 2006) wouldn't seem to have much in common with late colonial America. But, in fact, there are some striking parallels that offer lessons for Mexico's escalating drug war.

The most important illicit trade in colonial America was the smuggling of West Indies molasses to produce rum -- the drug of choice at the time and New England's top export (probably more important for the local economy than illicit drug exports are for Mexico today). Not unlike the situation in Mexico before Calderon launched his offensive, British authorities tolerated smuggling for many decades through a combination of neglect, incompetence and corruption.

The earlier corruption-plagued decades of the 18th century actually had a pacifying effect. Institutionalized bribery made bullying less necessary in port cities such as Boston, Providence and Newport, Rhode Island -- just as was the case not long ago in Mexico's border cities.

Both crackdowns provoked a violent backlash. Starting in the 1760s, bullying -- in the form of mob riots, the burning of customs vessels, and the tar-and-feathering of informants -- became increasingly common as bribery became a less dependable way of doing business. Then, as now, the authorities were overconfident. Instead of imposing order, there was more disorder. In tightening its grip, Britain ultimately lost its grip entirely.

Militarized Mistakes

And both efforts became increasingly militarized. The Royal Navy was unleashed against colonial smugglers because civilian customs agents had proven too corrupt and unreliable. Benjamin Franklin was among the many who denounced this punitive move.

As he sarcastically wrote: "Convert the brave, honest officers of your navy into pimping tide-waiters and colony officers of the customs. Let those who in the time of war fought gallantly in defense of their countrymen, in peace be taught to prey upon it. Let them learn to be corrupted by great and real smugglers; but (to show their diligence) scour with armed boats every bay, harbor, river, creek, cove, or nook throughout your colonies; stop and detain every coaster, every wood-boat, every fisherman...O, this will work admirably!"

Although much has obviously changed since Franklin's time, his basic criticism of drafting the military for anti-smuggling police work still holds true. Like Calderon's army-led crackdown, the British Navy's efforts led to growing opportunism and abuse by heavy-handed officials, generating local anger and resentment.

Fortunately, the parallels end there. Despite their extreme violence, Mexican traffickers are far less of a threat to the Mexican state than colonial smugglers proved to be to the British. Mexico isn't a failed state and traffickers aren't insurgents -- they lack political aspirations and want to be left alone.

But the surest way to politicize Mexico's drug war and turn drug trafficking into a political cause would be for the U.S. to escalate its already considerable on-the-ground involvement. The more Mexico's drug war looks like an American-orchestrated crackdown with direct U.S. military participation, the more Mexicans will view it as a foreign imposition -- risking a nationalist backlash that would erode public support and breed the type of local hostility that became all-too-familiar to British administrators in the colonies.

More constructive -- and with less collateral damage -- would be to focus on strengthening Mexico's fragile judicial system, curbing the illicit flow of U.S. firearms across the border and reducing America's seemingly insatiable drug habit.

KEYNOTE ADDRESS

IMPLICATIONS OF THE FUTURE SECURITY ENVIRONMENT FOR MARITIME OPERATIONS

Dr. Kathleen Hicks

Center for Strategic and International Studies

Former Secretary of Defense Robert Gates famously quipped that the United States has a perfect track record in prognosticating about future U.S. military operations: we are always wrong. The specific chain of events that leads to the use of military force or forces is indeed often unforeseen. Nevertheless, many of the underlying trends and factors that shape the application of force are more predictable. We must attempt to understand the future landscape for maritime operations if we wish to realize investments made today in people, platforms, concepts, and technology.

Future Security Trends

For the next twenty years, the United States is likely to remain the preeminent military power in the world and will also wield significant economic and cultural power. In some parts of the world, such as the Middle East, regional dynamics may make the relevancy or application of traditional U.S. strengths difficult. Many states in Latin America, Africa, South and Central Asia, and the Middle East will likely feel a greater freedom to make choices inconsistent with U.S. interests, such as developing opportunistic trade and arms sales partnerships with Iran, Russia, and China. In other areas, such as East Asia and perhaps Europe, U.S. military and economic power will likely continue to be highly influential. These trends do not presuppose the effectiveness of U.S. foreign policy, however. The more effective our use of power, the more it is likely to ameliorate worrisome trends.

The world will experience fully the shift of economic and security focus from Europe to Asia over the next twenty years. The role of China in this shift is central, but China's own future trajectory is far from certain. Whether China is able to fulfill its economic and military potential and how it seeks to influence the international system will critically affect the evolution of U.S. security over this period. Together with advances the United States makes in technology, tactics, and procedures, Chinese anti-access/area-denial capabilities—including in the air and maritime domains and, along with Russia, in space and cyberspace—will likely set the pace for high-end military capabilities.

The world will experience a significant increase in the number of people living in littoral urban environments over the next several decades, which has significant implications for maritime operations. The UK Ministry of Defense estimates that by 2040, 65% of the world's population will reside in cities—some 6 billion people.¹ The largest growth in megacities will take place in Africa and Asia. On these continents, North America, and elsewhere, many of these cities will reside in littoral zones. Wealth disparities, including slum-like conditions for a large subset of these populations, will combine with weak governance and lack of security to create tempting spaces for non-state actors to challenge national authorities.

Power will increasingly be atomized to the individual and small group level, due to the diffusion of advanced technology and information. This will create the means for individuals and small groups to exploit power vacuums or other dynamics for personal, political, or religious reasons, using such means as piracy, terrorism, and other forms of coercion. We should anticipate the increased use of mines, small boats, and swarming tactics; as technology and tactics evolve, other approaches may become more prominent.

Finally, over the next twenty years, we may see the beginnings of climate effects on natural resources and migration. Cities on the littorals will be at greater risk from natural disasters. The Arctic will likely not yet have ice-free summers, but energy and other interests will drive increased shipping, scientific exploration, and attendant political interest.

¹ UK Ministry of Defense, Strategic Trends Programme, "Global Strategic Trends—Out to 2040," Fourth Edition, updated 17 October 2013: 12. Accessed at <https://www.gov.uk/government/publications/dcdc-global-strategic-trends-programme-global-strategic-trends-out-to-2040>, 12 March 2014.

Relevant Maritime Capabilities

The trends depicted above, combined with an assumption of rough continuity in overarching U.S. economic and security interests, provide us with some insight into the types of maritime capabilities the United States, its allies, and partners should seek to secure. These include capabilities relevant for “low-end” missions, such as humanitarian assistance and disaster relief, counter-piracy, and coastal patrol. It also includes capabilities at the high end of potential conflict, such as the posturing, equipping, and operating of air and maritime forces in a resilient manner. Resiliency in turn will likely call for a combination of missile defenses, dispersed operations, cyber and space capabilities, and advanced offensive tactics in the subsurface, surface, and air domains. Submarine warfare, stealth, intelligence, surveillance and reconnaissance, special operations, and electronic and cyber warfare are all areas where the United States should seek to strengthen its advantages in this environment. At all points on the conflict spectrum, U.S. maritime forces will need regional knowledge and the skills to work among civilian populations.

Concluding Observations

In the next five to ten years, the United States will likely prioritize national debt reduction over defense spending, without making hard choices that would maximize the flexibility needed to strategically rebalance the U.S. defense budget. Resources will almost certainly be insufficient to cover the broad spectrum of potential threats that the Nation might face. Fiscal constraints will make adaptation for the future challenging, but they could also create the leadership focus needed for generational change.

The future may be uncertain, but uncertainty should not lead to paralysis. Many of the future trends and key capabilities cited above have been consistently noted by analysts for some time. Such conventional wisdom is bound to be wrong at least in part. Our overarching force planning principle should thus be the need for agility, so that we might flex our economic and technological advantages to the unforeseen vulnerabilities that we will encounter.

KEYNOTE ADDRESS

21ST CENTURY MAHAN

Lieutenant Commander Benjamin Armstrong, U.S. Navy

The world was experiencing a rapid globalization, rising powers in Asia threatened to change the balance of power, and across the globe there was a steady increase in naval spending. In the United States, parts of the political class insisted on focusing on “the problems at home,” and others feared that defense spending during challenging times would result in cookie cutter reductions across the services, without a thought of strategic considerations. The decades at the turn of the twentieth century were a challenging time for the United States.

Over a hundred years ago there was a strategist, historian and former naval officer who recognized and wrote on these subjects. He developed U.S. strategic approaches to difficult times and laid the foundation for what some have termed “The American Century.” Today, that thinker is all but forgotten in strategic discussions of modern day challenges. Yet the work of Alfred Thayer Mahan is a relevant source that should be considered in studying realist solutions for twenty-first century international relations.

The Mahanian Caricature

Mahan was born in 1840 on the banks of the Hudson River, at the United States Military Academy at West Point, where his father was a respected instructor in military engineering and strategy. As military children sometimes do, he rebelled against his father’s plans for his life in the most dramatic way possible: he joined the Navy. After studying law at Columbia briefly he applied for and received an appointment to the United States Naval Academy at Annapolis. He served as a junior officer in the Civil War and rose through the ranks to command the U.S. Navy’s European Flagship.

The Mahan known to most students of international relations today is a caricature of the actual man and what he wrote. Naval historian Geoffrey Till observed, “Mahan sometimes suffers from having written more than most people are prepared to read.” For the most part we are taught that he was a proponent of battleship fleets and America’s entry into colonialism. While both of these have a kernel of truth, he was certainly a navalist and believed strongly in the annexation of Hawaii and the building of the Panama Canal, these were just elements of a much larger and more thoughtful strategic approach to international affairs. Historian Jon Sumida labeled him the “inventor of grand strategy” and reading his voluminous articles and books can illuminate much more than how to deploy a fleet or the importance of colonies in a post-colonial world.

A Smaller World

Long before Tom Friedman wrote that the world was flattening because of globalization, Mahan wrote that the development of a global commercial system, “with the vast increase in rapidity of communications, has multiplied and strengthened the bonds knitting the interests of nations to one another, till the whole now forms an articulated system.” Steam power and the advent of both the intercontinental telegraph and wireless technology were rapidly changing the speed of communication both of physical goods and information. Mahan believed that “the world has grown smaller. Positions formerly distant have become to us of vital importance from their nearness.” Because globalization was a growing reality at the start of the twentieth century, Mahan felt that the global commons (a term he coined in his 1895 essay “The Future in Relations to American Naval Power”) required protection and defense.

If the status quo was the ideal, why did the global commons need defending? Mahan recognized that while the interest of the global system was important, each nation was more likely to have its own self-interest at the forefront of its foreign policy. He was a realist who believed that, because of the competition for raw materials and for markets in a growing global system, “commerce thus on the one hand deters from war, on the other hand it engenders conflict.”

In the competition for resources Mahan believed nations would likely take what they could, and figure out the legal and political justifications after the fact. Such naked competition led him to write that, “there do arise disputes where agreement cannot be reached and where the appeal must be made to force, that final factor which underlies the security of civil society even more than it affects the relations of

states.” Mahan believed economic and political conflict sometimes led to military conflict and he wanted to develop a strong American response to this reality.

Conflicting Groups

Before Thomas P.M. Barnett ever introduced international relations theorists and futurists to the idea of the “core” and the “gap” nations, Mahan was writing about two groups of people in the world. Mahan suggested that advancements in the west “have extended the means whereby prosperity has increased manifold, as have the inequalities in material well-being existing between those within its borders and those without.” This, he believed, would result in conflict. Globalization and the technological development of the West certainly had increased the standard of living of most Americans and Europeans, but Mahan knew that the economic difficulties of the rest of the world were just as important to the international order.

Mahan recognized the “inequalities” could cause conflict and he warned that “those who want will take, if they can for the simple reason that they have not, that they desire, and that they are able.” The challenge to international order was something Mahan foresaw, despite the fact that thinkers like Normal Angell were writing that globalization would mean the end of war. Other writers during his time believed that since economic difficulties were shared challenges they would balance one another. Mahan, on the other hand, realized these challenges would be shared unequally, and inequality was only going to add to international instability and stoke the fires of conflict.

The American Strategist

For decades the writing and strategic teaching of Alfred Thayer Mahan has been falling out of favor with those who seriously consider international relations. Part of the reason for this decline has been a lack of understanding. First, students and policymakers today don’t realize the similarities in the challenges faced by today’s world with those addressed by Mahan. Second, because they have been taught a caricature of the man and his ideas, they misunderstand the strategic relevance of his writing.

Reading Alfred Thayer Mahan’s work will not provide a prescription for today’s issues. As he once wrote, “the instruction derived from the past must be supplemented by a particularized study of the indications of the future.” But by studying his work, today’s policymakers and thinkers will better be able to ask the questions that can help determine a proper course for the twenty-first century.

PANEL 1: REFLECTIONS ON MARITIME STRATEGY

CLASSICAL THEORIES OF SEA POWER AND WORLD ECONOMIC SYSTEMS

Dr. Nicholas A. Lambert

Alfred Thayer Mahan and Julian S. Corbett were both prodigious writers. Like most military theorists, however, both are today more quoted than read. Each is remembered for producing one classic work apiece. For Mahan it was his first book, *The Influence of Sea Power upon History, 1660-1783*, published in 1890. In the case of Corbett, it was his last book written as an independent scholar, his theoretical treatise *Some Principles of Maritime Strategy*, printed in 1911. Neither book is easy to read, the Mahan volume more obviously so because of his dense, highly qualified and discursive writing style. Identifying his arguments is akin to sifting wheat from chaff—a laborious and lengthy process. While Corbett’s book is unquestionably more fluent, it is encumbered with seemingly irrelevant and excessive detail. More importantly, both works are riddled with sub-texts and allusions to contemporary issues the debate on which both men were seeking to influence, clouding their central messages. For the modern reader, proper understanding of the texts therefore requires familiarity of contemporary context and expert knowledge of long-forgotten debates.

Mahan’s literary career spanned more than two decades, during which time he published 20 formidable books (several of them multi-volume) and 137 articles, polemics and editorials. Corbett’s career was no shorter and his output scarcely less daunting. In consequence, it exceedingly difficult to define in general terms the theory of either. Particularly with respect to Mahan, modern day readers will perceive many inconsistencies in his argument; but before being too critical on this score it is well to remember how much the world changed between the publication date of his first book (1890) and his last (1912). Furthermore, Mahan (and Corbett) produced work for different audiences, at different times, in different contexts, with different agendas and from different points of departure.

On the surface, Mahan and Corbett had a great deal in common. Both agreed on the necessity for and importance of securing “command of the sea.” But they held subtly different understandings of what they meant by the term. Most of all, they possessed very different world views, particularly with respect to the global economy—and thus had very different understandings of how exactly sea power could and should be applied to achieve significant political results (i.e. influence the course of history).

II

“The history of sea power,” Mahan observed in the opening to *The Influence of Sea Power upon History*, is largely “a narrative of contests between nations, of mutual rivalries, of violence frequently culminating in war.” Although the first to coin the term “Sea Power,” as Philip Crowl remarked in his famous essay on Mahan, “he neglected to define it to any degree of precision.” It was, Mahan admitted in his preface, a nebulous concept:

It is easy to say in a general way, that the use and control of the sea is and has been a great factor in the history of the world; it is more troublesome to seek and show its exact bearing at a particular juncture. Yet, unless this be done, the acknowledgement of general importance remains vague and unsubstantial.

Although Mahan did not articulate a precise definition of “sea power,” however, his views on its purpose and importance are clear. In his introductory essay, titled “The Elements of Sea Power,” Mahan presented his hypothesis of a direct correlation between economic prosperity, trade and power. In his very first paragraph he explicitly articulated this presumption and its critical importance to national development:

The profound influence of sea commerce upon the wealth and strength of countries was clearly seen long before the true principles which governed its growth and prosperity were detected. To secure to one’s own people a disproportionate share of such benefits, every effort was made to exclude others, either by the peaceful legislative means of monopoly or prohibitory regulations, or, when these failed, by direct violence. The clash of interests, the angry feelings roused by conflicting attempts thus to

appropriate the larger share, if not the whole, of the advantages of commerce, of distant unsettled commercial regions, led to wars.

In chapter one, Mahan amplified his main argument and identified what would become the bedrock upon which he built his geopolitical theory, the concept of the global “common.”

The first and most obvious light in which the sea presents itself from the political and social point of view is that of a great highway; or better, perhaps, of a wide common, over which men may pass in all directions, but on which some well-worn paths show that controlling reasons have led them to choose certain lines of travel rather than others. These lines of travel are called trade routes, and the reasons which have determined them are to be sought in the history of the world.

In the preface, introduction and the opening to the first chapter of *The Influence of Sea Power Upon History*, therefore, Mahan explained the object, significance and purpose of sea power in terms of economic interest and indeed predicated his arguments upon the presumption of a dynamic interrelationship between sea commerce, wealth generation and national strength.

There and in subsequent books and essays, scholarly and journalistic, Mahan preached the critical importance of access to the “great common” for essentially economic reasons.

In an article published around the same time, Mahan was much more explicit about the critical importance of access to the ‘great common.’ “Some nations more than others, but all maritime nations more or less, depend for their prosperity upon maritime commerce, and probably upon it more than upon any other single factor,” he wrote.

Control of the sea, by maritime commerce and naval supremacy, means predominant influence in the world; because, however great the wealth product of the land, nothing facilitates the necessary exchanges as does the sea. The fundamental truth concerning the sea—perhaps we should rather say the water—is that it is Nature's great medium of communication.

Furthermore:

It is impossible that in one who sees in the sea—in the function which it discharges towards the world at large—the most potent factor in national prosperity and in the course of history, should not desire a change in the mental attitude of our countrymen towards maritime affairs. The subject presents itself not merely as one of national importance, but as one concerning the world's history and the welfare of mankind,

In sum: economics was central to Mahan’s world view. The purpose of navies was to exert control over common lines of sea communications. Sea communications, or trade routes, represented the arteries of the world economic system. Trade represented the life blood that fed the component parts of the body, i.e. the various nation-states. Those parts that were well-supplied with the “blood” of trade prospered; those parts starved, atrophied. For those nations that were highly dependent upon sea communications, furthermore, arterial blockages could be potentially fatal. The strategic object of sea power therefore was not offensive in nature but fundamentally defensive, to safeguard access to the sea and the free working of the global trading system. From Mahan’s perspective, therefore, the isolationist tendencies of the nation and the weakness of the U.S. Navy were major national security concerns.

III

In his basic definitions of sea power terminology, Julian Corbett essentially paralleled Mahan. He wrote “the object of naval warfare must always be directly or indirectly to secure command of the sea or to prevent the enemy from securing it.” The term “command of the sea,” he continued, meant “nothing but the control of maritime communications, whether for commercial or military purposes.” This is a reasonable enough approximation of Mahan.

That said, whereas Mahan’s aim was to convince his audience that sea power *did* matter and show *why*, Corbett was more interested in explaining *how* it was achieved and “exercised” in practice. Readers will note that the range of naval objectives discussed in *Some Principles*—securing command, disputing

command, and exercising command – are indicative. They constitute operational rather than strategic or geopolitical problems. Corbett’s particular aim was to persuade his core readership that the fleet’s proper primary function was not so much as to secure absolute command through destruction of the enemy fleet – which in his historical writings he showed had proven exceedingly difficult to attain – but rather to exercise relative command in pursuit of broader political aims and objectives. Relative command, he argued, translated as maintaining sufficient control over “passage and communications” in some particular theatre to permit some operational initiative.

Seemingly, Corbett agreed with Mahan about the centrality of economics to the theory of sea power. He acknowledged that attainment of relative command bestowed relative advantage in the attack and defence of trade. In *Some Principles* this is variously referenced as the “interdiction” or “capture” of enemy sea-borne commerce or private property, “trade prevention,” and “blockade.” In one passage Corbett went so far as to declare that the “capture or destruction of sea-borne property” was the “ultimate sanction.” This statement might reasonably be taken to suggest that he regarded commerce prevention as the *sine qua non* of sea power. Other statements may be found which seem to support this interpretation. For instance:

The primary method, then, in which we use victory or preponderance at sea and bring it to bear on the enemy’s population to secure peace, is by the capture or destruction of the enemy’s property, whether public or private.

And

By closing his commercial ports we exercise the highest power of injuring him which the command of the sea can give us. We choke the flow of his national activity afloat in the same way that military occupation of his territory chokes it ashore.

Elsewhere, Corbett went so far as to maintain that without the right of capture “naval warfare is almost inconceivable, and in any case no one has any experience of such a truncated method of war on which profitable study can be founded.”

The appearances of similarity between Mahan and Corbett on this point are deceiving, however. The Englishman demonstrably attached a much lower value to the importance of sea trade, indicative of his different understandings of the structure and functioning of the world economic system. In *Some Principles* he represents the attack and defence of trade as “deflection” from naval strategy – necessary for political reasons but nonetheless a distraction. He is quite explicit on this point. Moreover, his presentation of economic issues in *Some Principles* is decidedly un-systematic, scattered piece-meal throughout the book, in unexpected locations. It is difficult to escape the impression that Corbett was uncomfortable with discussing economics; at the very least his comprehension of this subject clearly did not match his mastery of politico-military issues. As critics of his historical monographs have pointed out, he paid insufficient attention to the interplay of commercial, financial and economic variables in the formulation of policy and deployment of sea power. To the extent that he did acknowledge them, he tended to treat them as constants.

While Corbett acknowledged the existence of a linkage between sea power and the global trading system, his understanding of that linkage was conditioned upon an understanding of the world economic system rooted in the eighteenth century. His discussions of commerce prevention are clearly predicated upon two related propositions: first, that the most important effects of such pressure are felt upon state finances; and second, that economic pressure must be a drawn-out affair that could “only work by a process of exhaustion.” Corbett did not understand the historically contingent nature of these dicta, however. They were (likely) true up through the eighteenth century, when national economies were overwhelmingly based upon agricultural output, agrarian societies depended upon the land and local markets with little role for the commercial middle classes, and states raised revenues chiefly from tariffs and excise duties. When international trade representing only a tiny percentage of economic activity, he was correct to say that the target of naval economic pressure would be state revenues and that the achievement of substantial strategic results would take considerable time. At the beginning of the twentieth century, however, Corbett’s understanding of the world economy was obsolete.

Finally, Corbett regarded the effective interdiction of British commerce as an abstract concept, shown to be impracticable in the past and likely to be even more unattainable in the future. He adhered to the Victorian-liberal viewpoint, that the enormous increase in international trade compounded the difficulties of effectively interdicting commerce. Put more simply, Corbett argues in *Some Principles* that the sheer volume of British trade, the small number of enemy warships relative to the number of British merchantmen, the vastness of the ocean, combined with recent technological developments (such as wireless) all favored the defense.

IV

If Corbett's views on the global economy matched those of Victorian liberals, Mahan's ideas on the economic imperative of access to the "great common" closely paralleled contemporary political-economic theory underpinning Republican geopolitical philosophy during the so-called Progressive Era. As is well known, many of Mahan's ideas were not new, merely restatements and refinements of ideas put forward by others. His earliest articles confirm that he was well-informed about contemporary political and economic affairs. Specifically, Mahan's world outlook conformed closely to several leading economists of the day, including Arthur Hadley, professor of political economy at Yale, Charles Conant, and Jeremiah Jenks of Cornell, all of whom became highly influential during the McKinley and Roosevelt administrations.

Familiarity with economics, or at least a willingness to engage the subject, may explain Mahan's remarkably sophisticated grasp of the global economy. He recognized its historically contingent and essentially dynamic character. He equated sea power directly with the dynamics of the world economic system. Borrowing the organic, biological metaphors common to many scholars of the day, he wrote of the economy and sea power as "complex organism, endowed with a life of its own, receiving and imparting countless impulses, moving in a thousand currents which twine in and around one another in infinite flexibility ... throughout all it lives and it grows." In 1902, he discerned that:

The unmolested course of commerce, reacting upon itself, has contributed to its own rapid development, a result furthered by the prevalence of a purely economic conception of national greatness during the larger part of the century. This, with the vast increase in rapidity of communication, has multiplied and strengthened the bonds knitting the interests of nations one to another, till the whole now forms an articulated system, not only of prodigious size and activity, but of an excessive sensitiveness, *unequaled in former ages*. The preservation of commercial and financial interests constitutes now a political consideration of the first importance, making for peace and deterring war. Emphasis added.

Again, like the simpler global-common-of-the-ocean analogy, this dynamic articulated system of integrated networks placed international trade—and economics—at the center of his world model.

V

Mahan and Corbett possessed very different conceptions of sea power and the application of naval force, stemming from their different understandings of the importance of trade, which was itself conditioned by their differing comprehension of how the world economy functioned.

Mahan, a geo-politician, possessed a clear set of ideas as to how the world worked, manifest in his theory correlating the relationship between trade, wealth creation and power (and the tendency toward war). Fundamentally he saw the maritime global trading system as a great wealth-generating machine; from wealth came power. In effect, Mahan was offering the United States his vision of national security in a modern, industrial, democratic, capitalist world.

Corbett, in contrast, regarded the economic effects of trade interdiction as peripheral, of significance only perhaps in a protracted war measured in years if not decades. His model of world economics, insofar as he had one, was static in conception—he thought in terms of stocks rather than flows. Certainly he showed no inkling (unlike Mahan) that trade bred trade.

It might be true that Mahan exaggerated the historical importance of sea power and of trade, but he was not wrong to be convinced of its significance at the time he wrote. Moreover, he correctly forecast that international trade would in future likely prove relatively more important, the global system would prove more vulnerable to disruption, and thus the potential of sea power would be greater. Mahan

understood that the modern “globalised” world economy, though he only dimly could make out its precise shape and form, was a fundamentally dynamic system. This point is critical.

Even in his first book, Mahan saw the implications of disruption to dynamic economic systems. This concern was foundational to his concern over a blockade of U.S. sea ports. Looking to the future, however, Mahan discerned more. He recognized, albeit dimly, the growing importance of trade to national economic wellbeing and the interconnectedness of economies. Apparently, however, he never connected all the dots. He stopped short of suggesting that in future wars the application of sea power alone might prove sufficient to achieve strategically significant outcomes. Moreover, he did not perceive that a total embargo was not necessary to collapse modern industrial societies: he did not see that their economic, and thus political and moral, dependence on access to the oceanic commons was so great that even partial disruption of their access could produce decisive results. Others, including the architects of Britain’s plan to wage economic warfare in 1914, did appreciate sea-power’s potential to exploit this vulnerability.

Notwithstanding the limits of his vision, Mahan’s commitment to placing sea-power within its global economic context makes him a grand strategic thinker, while Corbett’s ignorance of the dynamics of the global economy makes him essentially an operational thinker. This conclusion is of course the opposite of the conventional depiction, which features Mahan as the crude reducer of naval power to decisive battle between battle fleets, and Corbett as the sophisticated champion of seaborne communications as an element of national power.

PANEL 1: REFLECTIONS ON MARITIME STRATEGY

REFLECTIONS ON CHINA'S MARITIME STRATEGY: ISLAND CHAINS AND THE CLASSICS

Dr. Bernard D. Cole
National War College

Introduction

My task today is to reflect on the influence on current Chinese maritime strategic thought by the individuals we might describe as “classic maritime strategists.” These include, of course, Alfred Thayer Mahan and Julian Corbett. Others might include P.H. Colomb, Herbert Richmond, and Raoul Castex; I add to this latter group Admirals John (“Jacky”) Fisher, Ernest King, Arleigh Burke, J.C. Wylie, Elmo Zumwalt, John Lehman, Sergei Gorshkov, and Liu Huaqing. Several of these never wrote down formal maritime strategic thoughts, but their organizational and leadership contributions made a strategic difference in their nation’s maritime narrative. And while they probably never saw an ocean, Sun Zi and Carl von Clausewitz are strategists who deserve consideration in a discussion of Chinese maritime strategy.

Sun Zi’s focus on deception, for instance, is certainly germane to the twenty-first century emphasis on electronic and information warfare, expressed in innumerable reports of People’s Liberation Army Navy (PLAN) exercises and in naval and civilian leaders’ exhortations to that navy.

China’s propensity for “teaching a lesson” as a strategic goal when employing military force in a situation perhaps deemed inappropriate by Western analysts fits into Clausewitz’s discussion of two types of war, limited and absolute, despite that strategist’s lack of maritime experience.¹

As for defining “maritime strategy,” I would just offer the usual pabulum matching necessary resources with attaining national maritime goals. A modern maritime strategy must involve air, space, cyber, sea and land forces operating jointly throughout the maritime environment, from the littoral to “blue water.” These are all objectives of repeated PLAN exercises.

The concepts of “command of the sea,” “sea denial,” and “sea control” remain useful discussion points and, of course, a nation’s maritime strength includes both naval and commercial maritime forces and infrastructure. China certainly is fulfilling these characteristics.

The relationship among national naval power, economic development, and international relations underlies Chinese maritime strategy, currently framed by the “near seas,” the Yellow, East China, and South China Seas; the “middle sea,” including much of the Philippine Sea; and the “far sea,” the waters outside the second island chain.

Current Chinese thought also acknowledges Corbett and Mahan’s strategic views emphasizing the importance of economics and trade, lines of communication at sea, and employing naval power to attain national security aims.

I also note Wylie’s comment that the purpose of sea power is “the actual establishment of control on land” or “the ‘establishment of governing control over the enemy in his own land,’ which may echo Corbett more than it does Mahan, but also reflects current Chinese concern about Taiwan and other disputed islands.²

Wylie also denigrated the concept of a single, coherent maritime strategy, stating “the requirement is for strategies of depth and breadth, flexible and adaptable, which by intent and by design can be applied

¹ PLA involvement in Korea in the early 1950s was a disaster in terms of personnel losses, but is considered a “victory” because of the continuation of the North Korean state; and the PLA’s performance in Vietnam in 1979 was by Deng Xiaoping’s own measure poor—but considered to have taught Hanoi a “lesson” about actively opposing Chinese policies. See Shu Guang Zhang, *Mao’s Military Romanticism: China and the Korean War, 1950-1953* (Lawrence: University Press of Kansas, 1995); Mark A. Ryan, David M. Finkelstein, and Michael A. McDevitt (eds.), *Chinese Warfighting: The PLA Experience Since 1949* (Armonk, N.Y.: ME Sharpe, 2003); Peng Guangqian and Yao Youzhi (eds.), *The Science of Military Strategy* (Beijing: Military Science Publishing House, 2005); Edward O’Dowd, *China’s Military Strategy in the Third Indochina War: The Last Maoist War* (London: Routledge, 2007).

²Quoted in John B. Hattendorf, “Introduction” to J.C. Wylie, *Military Strategy*, Classics of Sea Power series (Annapolis: Naval Institute Press, 1989), xxvi.

to unforeseen situations.”³ Mahan also was well aware of the complexity of warfare, which “could not be encompassed by any system of theory.”⁴

Related is Mahan’s emphasis on the need for oversea naval support bases, a concept appreciated by the PLAN as it conducts deployments to the Gulf of Aden. While the “string of pearls” is more verbiage than reality, China is currently negotiating with Djibouti to join several other nations in establishing a logistics facility in that country.⁵

Beijing’s focus on strategic maritime issues is understandable, given China’s 10,250 nautical miles (nm) of coastline, more than 6,500 islands claimed. China also has eight of the world’s ten largest harbors in the world, its shipping fleet is the world’s fourth largest, “ocean-related activities” comprised almost 10 percent of the nation’s gross domestic product (GDP) in 2009, and its economy—and hence political stability—is heavily dependent on sea borne trade.⁶

Maritime Strategy in China

The nineteenth century Western onslaught on Qing China brought home to many officials the necessity of modernizing their country’s military might, including its navy. The dynasty succeeded in organizing and equipping a modern navy, but foundered in wars with France and Japan. Those failures resulted largely from the absence of inadequate training, unified command, common doctrine, and a clear strategy.

The People’s Republic of China (PRC) emerged in 1949 with no navy to speak of; its initial maritime force was imported from the Soviet Union, as was its initial maritime strategy, the “Young School” of the 1920s. This defined a naval role largely limited to supporting the army’s operations ashore.

Chinese Leadership

Mao Zedong wrote in 1953 “we must build a strong navy for the purpose of fighting against imperialist aggression.” In 1979, Deng Xiaoping called for “a strong navy with modern combat capability,” although emphasizing its role in coastal defense. Jiang Zemin urged the navy in 1997 to “build up the nation’s Great Wall.”⁷ Hu Jintao implied strategic maritime concerns when he urged the Central Military Commission (CMC) in 2004 to “accelerate the transformation and modernization of the Navy ... and make extended preparations for warfare in order to make greater contributions to safeguarding national security and world peace.”⁸ He later noted the importance of maritime border issues, Taiwan’s status, and “protection of China’s expanding national interests,” including missions other than war.⁹

Most recently, Xi Jinping’s enunciation of a “China Dream” has engendered articles calling for a strategy of “outward-oriented military power,” to include “limited global military power...capable of protecting distant sea lanes.”¹⁰

Liu Huaqing’s Vision

China’s most influential flag officer has been Liu Huaqing who played a role similar to that of Soviet Admiral Sergei Gorshkov. Liu’s “sea daddy” instituted dramatic changes in maritime strategy during a long tenure as Soviet navy commander. Gorshkov no doubt influenced Liu, but the latter’s ability to make significant changes was delayed by the 1966-1976 Great Proletarian Cultural Revolution and the following three-four years of political disarray.

³ Ibid.,153.

⁴ Jon Tetsuro Sumida, *Inventing Grand Strategy and Teaching Command: The Classic Works of Alfred Thayer Mahan Reconsidered* (Washington, D.C.: The Woodrow Wilson Center, 1997), 113ff.

⁵ “Djibouti Wants to Reinforce Military Cooperation With China,” *Shabelle Media Network* (Modadishu: 28 February 2014), at: <http://allafrica.com/stories/201403010068.html> (accessed 02 March 2014).

⁶ This data is from “Sailing on a Harmonious Sea: A Chinese Perspective,” *Global Asia* 5, no. 4 (Winter 2010), at: <http://www.chinausfocus.com/peace-security/sailing-on-a-harmonious-sea-a-chinese-perspective/> (accessed 28 February 2014).

⁷ Quoted in Cha Chun-ming, “Chinese Navy Heads Toward Modernization,” *Ta Kung Pao* (Hong Kong: 11 April 1999), B6, in Foreign Broadcast Information Service-China (FBIS-CHI)-1999-0418.

⁸ Quoted in “Chinese President Meets Deputies for Military Meetings,” *Xinhua* (07 December 2011), at: http://news.xinhuanet.com/english/china/2011-12/06/c_131291648.htm (accessed 29 January 2012).

⁹ Discussed in James Mulvenon, “Chairman Hu and the PLA’s ‘New Historic Mission’,” *China Leadership Monitor*, No. 27 (09 January 2009), at: <http://www.fnvaworld.org/download/tibet-related-doc/Hu-PLAs-missions-2008.pdf> (accessed 14 May 2012).

¹⁰ “The China Dream on the Threshold of the Dream of a Strong Military,” *Zhongguo Meng Shi Yui de Qinagjun Meng*, quoted in David Cohen, “In a Fortnight,” *China Brief* XIV, Issue 3 (Jamestown Foundation: 06 February 2014), at: <http://www.jamestown.org/programs/chinabrief/inafortnightcb/> (accessed 25 February 2014).

His 1980s plan for modernizing the navy is usually described as a three- stage program¹¹:

- ♦ By 2000, the PLAN would be capable of exerting sea control out to the First Island Chain, defined by the Kurile Islands, Japan and the Ryukyu Islands, the Philippines, and the Indonesian archipelago.
- ♦ By 2020, sea control would be enforced out to the Second Island Chain, defined by the Kuriles, Japan and the Bonin Islands, the Marianas Islands, Palau, and the Indonesian archipelago.
- ♦ By 2050, the PLAN would operate globally, with aircraft carrier battle groups.

The immediate obstacles confronting Liu in the 1980s were a longstanding continental security perspective, internal PLA resource battles, and domestic politics; these had to be overcome through the nitty-gritty of implementing a maritime strategy addressed by Arleigh Burke and demonstrated by John Lehman. The Chinese military was and remains dominated by the army in terms of leadership, numbers, and influence, but that appears to be changing in favor of the other services.¹²

The First Chain

The initial goal of Liu's strategy—command of the sea out to the First Island Chain—was not realized by its target date of 2000 or, one might argue, even by 2014. He did succeed, however, in the key goal of gaining the support of China's civilian leadership support for the increased resources to develop a 21st-century navy to achieve the nation's strategic maritime goals.

Chinese analysts today identify classic naval missions as the reasons for a maritime strategy. Presence, protection of sea borne trade, counter-piracy, non-combatant evacuation operations (NEO), deterrence, and preparing for joint warfare at sea in defense of vital national security interests, including power projection ashore, are all being exercised by the PLAN.¹³

These efforts have been publicly subsumed by Beijing's insistence that China's "core interests" are inflexible strategic requirements: "state sovereignty, national security, territorial integrity and national reunification, China's political system established by the Constitution, overall social stability, and the basic safeguards for ensuring sustainable economic and social development."¹⁴

These concerns, issues, thoughts, missions, and plans are elements in China's undeclared maritime strategy. "National reunification" obviously refers to Taiwan; "state sovereignty" and "territorial integrity" include Xinjiang and Xizang Provinces, but likely also includes contested insular land features in the East and South China Seas. If these latter are "core interests"--and since Beijing reserves entirely to itself the definition of that category--the application of a Chinese maritime strategy becomes more problematic.¹⁵

March 2014

China has built a navy capable of impressive regional presence and discreet global operations. Developing the doctrine and operational capabilities to bring its new naval power to fruition requires

¹¹ Taylor Fravel, of MIT, provides a very useful collection of articles addressing South China Sea issues at: <http://taylorfravel.com/> (accessed 26 February 2014).

¹² First, China's 2004 Defense White Paper stated "The PLA will promote coordinated development of firepower, mobility and information capability, enhance the development of its operational strength with priority given to the Navy, Air Force and Second Artillery Force." Second, at the CCP's Eighteenth Party Congress, in November 2012, President Hu Jintao emphasized that the other services would be playing a more important role in China's military, asserting "We should attach great importance to maritime, space and cyberspace security." Third, General Xu Qiliang argued that "We should, lay stress on strengthening the building of the Navy, Air Force, and Second Artillery." Then, in November 2013, a senior MR commander speaking at the U.S. NDU stated that the PLA was going to become more balanced, with the army being deemphasized in favor of the navy and air force. Finally, in January 2014, Chinese military analysts described a "new joint command system" reflecting "naval prioritization."

¹³ See Bernard D. Cole, *The Great Wall at Sea*, 2nd ed. (Annapolis: USNI Press, 2010), Chs. 7,8; David Liebenberg and Jeffrey Becker, "Recent Personnel Shifts Hint at Major Changes on the Horizon for PLA Navy Leadership" (Arlington, VA: The Center for Naval Analyses, 07 February 2014), at: <http://www.cna.org/news/commentary/2014-2-7-recent-personnel-shifts-hint-major-changes-horizon> (accessed 25 February 2014).

¹⁴ "China's Declaration of Key Interests Misinterpreted," *Beijing Review* (26 August 2013), at: http://www.china.org.cn/world/2013-08/26/content_29824049.htm (accessed 25 February 2014).

¹⁵ This final thought is mine; indeed, given the positive trend of relations between Beijing and Taipei under the Ma Ying-jeou administrations, and Beijing's continental grasp on Tibet and Xinjiang, China's "core interests" seem relatively secure in 2012. The core interests issue is discussed in Michael Swaine, "China's Assertive Behavior," (Washington, D.C.: Carnegie Endowment for International Peace, n.d.), at: http://carnegieendowment.org/files/CLM34MS_FINAL.pdf (accessed 14 May 2012).

naval leadership capable of succeeding in the contentious national and military resource allocation process. Admirals Shi Yunsheng and Wu Shengli appear to have fared very well the PLAN in that process, establishing the navy as a key element in China's strategic position as a major power.

Beijing has not openly promulgated a formal maritime strategy, but it has published important documents addressing the maritime theater.¹⁶ One is the 1998 "National Ocean Policy of China."¹⁷ Another is the Defense White Papers, the most recent of which was published in February 2013.

The Ocean Policy identifies important maritime concerns, including:

- ♦ safeguarding [China's] marine rights and interests," outlined in the 1992 "Law of the People's Republic of China on its Territorial Seas and Adjacent Zones."
- ♦ strengthening "the comprehensive development and administration of its coastal zones ... and protect[ing] the offshore areas," and "form[ing] coastal economic belts and marine economic zones."
- ♦ planning and implementing "development of marine resources and the protection of the marine environment," while improving "monitoring, surveillance, law enforcement, and management" of that environment.
- ♦ "reinforcing oceanographic technology research and development"
- ♦ "setting up a comprehensive marine management system," and
- ♦ actively participating in "international cooperation in the field of marine development."¹⁸

China's series of *Defense White Papers* are important indicators of Beijing's maritime strategic thought.¹⁹ The 2004 *White Paper* claimed "the Navy has expanded the space and extended the depth for offshore defensive operations." The 2006 *White Paper* then stated "the Navy aims at gradual extension of the strategic depth for offshore defensive operations..." which was followed by the 2008 version's statement "since the 1980s the Navy has realized a strategic transformation to offshore defensive operations." The PLAN's strategic aim was described in the 2010 *Defense White Paper* as "in line with the requirements of offshore defense strategy..."²⁰

The 2012 version described the Navy's role in a national defense focused on "safeguarding national sovereignty, security and interests of national development ... tasked to guard against and resist aggression, defend the security of China's lands, inland waters, and territorial waters ... [and] safeguard its maritime rights and interests" pressured by the ongoing sovereignty disputes in the East and South China Seas. Defending the security of territorial waters is repeated as integral to "National Defense Policy."

¹⁶ See, for instance, Fei Shiting and Chen Xiaojing, "Enrich and Strengthen the Nation Through Maritime Development—PLA Deputies to the NPC Call for Introducing a Maritime Strategy," *Jiefangjun Bao* (09 March 2012), 7, in OSC-CPP20120309787007.; Rear Admiral Yin Zhou's statement in "China's Maritime Strategy Being Tested Amid South China Sea Disputes," *Beijing Caijing* (24 October 2011), at: <http://english.caijing.com.cn/2011-10-24/110914257.html> and Major General Luo Yuan, quoted in Russell Hsiao, "Military Delegates Call for National Maritime Strategy to Protect Expanding Interests," *China Brief* 11, Issue 4 (Jamestown Foundation, 10 March 2011), at: http://www.jamestown.org/single/?no_cache=1&tx_ttnews%5Btt_news%5D=37629&tx_ttnews%5BbackPid%5D=7&cHash=79f56b556ae0003e6afc755934e1fa54 (both accessed 14 May 2012). The degree of policy-making incoherence in Beijing was indicated in a July 2011 speech by Major General Zhu Chenghu, reported at: <http://opinion.huanqiu.com/roll/2011-07/1792964.html> (no longer available online), who called for a South China Sea strategy "where the lead agency is the State Oceanic Administration with input from the PLA, MFA, PSB, Ministries of Agriculture, Transportation, Defense, Customs, and coastal provincial governments.

¹⁷ This is an old document, but still seems accurate in describing China's current maritime policies: "National Ocean Policy of China," Information Office of the State Council (Beijing: May 1998), at: http://www.jodc.go.jp/info/ioc_doc/Technical/158387e.pdf (accessed 13 May 2012). But also see "China Issues Plan for Maritime Development," *Xinhua* (26 April 2012), at: http://news.xinhuanet.com/english/china/2012-04/25/c_131551501.htm (accessed 07 June 2012).

¹⁸ *Ibid.*, 76-78. Also see Liu Shuguang, "China's Marine Economy," *East Asia Forum* (17 November 2011), at: <http://www.eastasiaforum.org/2011/11/17/china-s-marine-economy/> (accessed 16 May 2012), who reports that "national-level marine economic-development zones" have been established by Guangdong, Shandong, and Zhejiang Provinces.

¹⁹ May be found at: http://china.org.cn/government/whitepaper/node_7114675.htm (accessed 14 May 2012).

²⁰ I am indebted to Dr. Nan Li, of the Navy War College's China Maritime Studies Institute, and to Dr. Thomas Bickford, of the Center for Naval Analyses, for this discussion.

People's Liberation Army Navy

Beijing's creation of a large modern navy capable of operating in the 21st-century maritime arena is an achievement marked by three milestones.

- ♦ Admiral Liu Huaqing's early 1980s strategic plan for a three-stage plan to build a modern Chinese navy.
- ♦ the 1995-96 Taiwan Strait Crisis, and
- ♦ the successive deployments of Chinese naval task groups to the Gulf of Aden.

Recent PLAN exercises demonstrate that it can operate 21st-century ships on deployment to far seas, although the strategic theory espoused in public by Chinese analysts still utilizes a maritime paradigm based on island-chains, which does not fit with traditional naval strategic theory. However, the Chinese version of "defense" is an "active defense" concept that enhances the PLAN's ability to defend the near seas. The mission is "to do all we can to dominate the enemy by striking first. ... as far away as possible."²¹

Strategic Debate?

Most significantly, despite the large annual defense budget increases, China appears to be adhering to a goal of 2050 for achieving a completely modern military. Hence, the PLAN also probably sees itself at the halfway mark in its overall modernization program.²²

Representatives at the early spring 2012 meeting of the National People's Congress, in Beijing, vociferously criticized the lack of a maritime strategy, calling for the government to "formulate and promulgate a complete, comprehensive, and systematic maritime development strategy, with all the national political, economic, military factors being brought into consideration!"²³

Despite the lack of a published maritime strategy, the PLAN plans and operates along lines of guidance from China's National Command Authority (NCA), that equate to a strategy.

Beijing delineates defensive maritime security zones in which it aims to prohibit foreign surveillance and reconnaissance activities or any other actions it finds objectionable. This provides the basis for a maritime strategy with legal, national security, domestic political stability, and fleet composition components.

For instance, during the 2010 discussion of U.S. aircraft carrier deployments to the Yellow Sea, following the *Cheonan* incident, a Chinese Foreign Ministry spokesperson stated "We resolutely oppose foreign military ships and aircraft coming to the Yellow Sea and other Chinese adjacent waters and engaging in activities that influence China's security interests."²⁴ This view, combined with the aggressive actions against foreign fishing craft in the South China Sea during the past decade or more, and actions against U.S. surveillance aircraft and ships all point toward a view of "sovereign" waters far in excess of those delineated by the United Nations Convention on the Law of the Sea (UNCLOS).

²¹ Anti-access/Area Denial apparently is not discussed, per se, in Chinese literature, although Shi Xiaoqin, "The Boundaries and Directions of China's Sea Power," in Peter Dutton, et al (eds.), 137, advocates the PLAN developing "the capacity to deny access to the [U.S.] navy to China's sea territory." The PLA's "Active Strategic Counterattacks on Exterior Lines" (ASCEL)—or "counter-intervention"—approximates that operational policy and is discussed in Anton Lee Wishik, "An Anti-Access Approximation: The PLA's Active Strategic Counterattacks on Exterior Lines," *China Security*, No. 19 (2011), 37-48, at: http://www.chinasecurity.us/index.php?option=com_content&view=article&id=48 (accessed 14 May 2012). Major General Peng Guangqian, *Research on China Military Strategy Issues* (Beijing: PLA Press, 2006), 248, quoted in Wishik, 3 and in Michael A. McDevitt, "The PLA Navy Anti-Access Role in a Taiwan Contingency," a paper prepared for the 2010 Pacific Symposium on "China's Naval Modernization: Cause for Storm Warnings," National Defense University, Washington D.C., 10 June 2010, 3.

²² My discussion with Dennis J. Blasko. Also see Blasko's "An Analysis of China's 2011 Defense Budget and Total Military Spending: The Great Unknown," China Brief 11, Issue 4 (Jamestown Foundation, 11 March 2011), at: http://www.jamestown.org/single/?no_cache=1&tx_ttnews%5Btt_news%5D=37631&tx_ttnews%5BbackPid%5D=517#UqTo_14aU00 (accessed 08 December 2013).

²³ My conversations with Captain Bernard Moreland, USCGR (Ret.), former USCG representative in Beijing; my conversation with the Director of MOFA's Bureau of Boundary and Maritime Affairs (Beijing, December 2012). For a useful explanation of China's coast guard organizations, see Lyle J. Goldstein, *Five Dragons Stirring up the Sea: Challenge and Opportunity in China's Improving Maritime Enforcement Capabilities*, *China Maritime Study No. 5* (Newport, R.I.: Naval War College Press, April 2010). Nine such organizations are noted in Fei Shiting, Chen Xiaojing: "Enrich and Strengthen the Nation Through Maritime Development -- PLA Deputies to the NPC Call for Introducing a Maritime Strategy," *Jiefangjun Bao* (09 March 2012), 7, in OSC-CPP20120309787007 (accessed 10 March 2012).

²⁴ Statement is at <http://www.mfa.gov.cn/chngxh/tyb/fyrbt/jzhsl/t714888.htm> (accessed 22 December 2011).

Conclusion

A January 2012 assessment of “China’s naval rivals” focused on the U.S. Navy as “a strategic opponent of the Chinese Navy.” Japan was then highlighted as a more immediate concern, based on “naval hatred stretching over 100 years Diaoyu Island [Senkaku Islands] sovereignty, maritime boundaries in the East China Sea, and the possibility of Japanese military interference in the Taiwan issue and the South China Sea.” Vietnam and the Philippines were listed as “local tactical opponents” and India as a “potential blue water opponent.” The analysis concluded that the “Chinese Navy now faces a maritime competition structure that involve a broad maritime region, great depth, and multiple opponents.”²⁵

The PLAN has almost certainly gained influence within the NCA during the past two decades, but the question remains about the degree to which the PLAN influences the national security policy making and strategic thought in Beijing. The navy commander first became a member of the Central Military Commission in 2004, but an admiral served on the Politburo Standing Committee since Admiral Liu Huaqing retired in 1997.²⁶

Sun Zi may be credited, or blamed, for what might be a dangerous weakness in Chinese maritime strategic thought: an unrealistic belief in the ability to control unintended escalation during an incident at sea, as evidenced in various crises since 1950. Whereas Clausewitz (“friction”) and Mahan certainly understood the uncertain nature of events at sea, Sun Zi argued that one can plan for almost any eventuality in war.²⁷

China is attempting to become both a continental and a maritime power, a difficult transition, rare in history. France, Germany, and Russia all failed to do so. A former U.S. commander of Pacific forces, Admiral Robert Willard, has opined that China “aspires to become a ‘global military (power)’ by extending its influence beyond its regional waters.”²⁸ If China succeeds in building and deploying an effective, global navy, it will have beaten the historical odds.

In 1999, I wrote that “the PLAN required to carry out Liu Huaqing’s strategy would include task groups of missile-firing, power-projection capable ships supported by nuclear-powered submarines and tactical air power.” This force structure (Deng Xiaoping’s statement that “without air cover, winning a naval battle is out of the question”) is still nascent, but appearing on the horizon.²⁹

That campaign is being guided by a *de facto* maritime strategy that indeed draws on the usual stable of classic strategists: Corbett, Mahan, Sun Zi, and Clausewitz. China does, then, have a maritime strategy.

²⁵ Hai Tao, “The Chinese Navy Has a Long Way to Go to Get to the Far Seas,” *Guoji Xianqu Daobao* (Beijing), in OSC-CPP20120109671003 (06 January 2012), accessed 09 February 2012.

²⁶ Linda Jakobson and Dean Knox, “New Foreign Policy Actors in China,” *SIPRI Policy Paper No. 26* (Stockholm: SIPRI, September 2010), note the PLA’s reputation as “hard line” on issues such as Taiwan’s status, but conclude that PLA influence on national policy-making remains “difficult to assess.”

²⁷ Discussed in Scott Fitzsimmons, “Evaluating the Masters of Strategy: Comparative Analysis of Clausewitz, Sun Tzu, Mahan, and Corbett,” *Innovations* 7 (2007), at: <http://www.ucalgary.com/innovations/files/innovations/Fitzsimmons-EvaluatingtheMastersofStrategy.pdf> (accessed 26 February 2014).

²⁸ Quoted in Yoichi Kato, “U.S. Commander Says China Aims to be a ‘Global Military’ Power,” *Asahi Shimbun* (28 December 2010), at: <http://www.asahi.com/english/TKY201201270279.html> (accessed 30 January 2012).

²⁹ Bernard D. Cole, “China’s Maritime Strategy,” in Susan M. Puska, ed., *People’s Liberation Army After Next* (Carlisle, PA: Strategic Studies Institute of the Army War College, 2000), 296; Deng is quoted in John Wilson Lewis and Xue Litai, “China’s Search for a Modern Air Force,” *International Security* 24, no. 1 (Summer 1999), 10.

PANEL 1: REFLECTIONS ON MARITIME STRATEGY

THE EVOLUTION OF AMERICAN PEACETIME NAVAL PRESENCE

Dean Robert C. Rubel
U.S. Naval War College

From its beginnings the United States has had an interest in extending its voice and influence overseas, propelled by the simple logic that if what happens “over there” affects what happens here in North America, then the U.S. ought to have some say in it. The purposes and means for projecting influence have evolved over our history, especially in the maritime realm. This evolution has not only been a function of new naval technologies; it has been shaped by expanding U.S. interests and threats that have emerged overseas. This paper will provide a short account of the phases of U.S. peacetime naval operations that have been focused on extending U.S. voice and influence, and culminate in a discussion of how U.S. peacetime naval operations might evolve in the future. This paper is based in part on an article I published in the Autumn 2013 Naval War College Review entitled “National Policy and the Post-Systemic Navy.”

The Constitution of the United States directs Congress to “provide and maintain a navy.” The obvious inference drawn from the word “maintain” is that the Republic has a continuing need for a navy in peacetime, thus justifying its expense. The force structure of the U.S. Navy has ebbed and flowed over the 238 years of the nation’s existence, but an examination of the Navy’s history reveals that administrations have repeatedly used the available force to project influence and protect interest overseas, either episodically or continuously. The nature of this evolution can provide us with insights that help us foresee how the Navy’s peacetime roles will change in the future.

The Early Republic: The “Hamiltonian Era”

Alexander Hamilton was an early proponent of a strong navy, and in Federalist Paper 11 he offers a clear logic for its use in peacetime:

A further resource for influencing the conduct of European nations toward us ... would arise from the establishment of a navy.” A navy of sufficient size and power would, if committed on the side of one external power or another in a war in the West Indies, constitute the margin of victory: “It will be readily perceived that a situation so favorable would enable us to bargain with great advantage for commercial privileges. A price would be set not only upon our friendship, but upon our neutrality. By a steady adherence to the Union we may hope, ere long, to become the arbiter of Europe in competitions in this part of the world as our interest may dictate.

While Hamilton’s vision was not fully realized, the U.S. Navy was repeatedly dispatched overseas to secure U.S. commercial interests, including expeditions against the Barbary Pirates, the Exploration Expedition of 1838-42 and Matthew Perry’s opening of Japan in 1854.

Post-Spanish-American War: “The Mahanian Era”

As a consequence of its victory over Spain the U.S. found itself with overseas interests in the form of island possessions and eventually the Panama Canal. Peacetime naval operations were shaped to provide security for this new sea power infrastructure. The U.S. Navy builds a great fleet and becomes one of the world’s principal maritime powers. The voyage of the Great White Fleet and the maintenance of an Asiatic Fleet indicate the breadth and permanence of America’s overseas maritime interests. The era culminates with the Two-Ocean Navy Act and subsequently World War II.

Post World War II: “The Huntington Era”

This era is named in honor of noted political scientist Samuel Huntington who wrote a seminal article in 1954 in Proceedings entitled “National Policy and the Trans-Oceanic Navy.” The U.S. Navy shifts to a posture of permanent forward deployment around the periphery of Eurasia in order to counter a potentially expansionist continental power. Peacetime deployments contribute to deterrence and also to

reassurance of allies and friendly nations. There is also the element of being ready to respond, which came into play a number of times, including Korea, Vietnam and Kuwait in 1990. This era culminates with the collapse of the Soviet Union.

Post 9/11: “The Systemic Era”

The threat of a terrorist attack mounted or supported from the sea prompted the Navy to seek ways of creating global maritime security. Several years of groping for an answer finally resulted in the issuance of “A Cooperative Strategy for 21st Century Seapower.” The Navy and its sister Sea Services committed to deploying in order to “protect and sustain the peaceful global system.” This represented a significant departure from the previous logic of peacetime deployments as it was less of a sovereign nature and more fundamentally cooperative. While this strategy gained widespread approbation overseas, greatly enhancing U.S. voice and influence in the maritime realm, the rise of China and its continental approach to security threatens to force the U.S. to revise the logic of its peacetime deployment posture.

The Rise of China: A New Elephant versus an Old Whale?

The U.S. has established, via the Bretton Woods accords, a globe-wide liberal trading system that constitutes the heart of the maritime approach to security. It is based on the free movement in the maritime domain and on the workings of the market. The continental approach, by contrast, emphasizes control of security zones and the exclusion of outsiders from those zones. China is pursuing such a strategy as can be seen both in its territorial claims in the East Asian littoral and in its mercantilist approach to trade. In order to maintain an open maritime order in East Asia and elsewhere, the U.S. may have to revert to Huntington Era deployment logic. The challenge will be to maintain an effective deterrent posture in a missile-centric age. Forward presence patterns and modes will shift and the Navy will need to be ready to adjust. Relatively small numbers of highly capable warships will not provide the necessary flexibility. Future fleet architecture will have to provide for both wide distribution of forces and credible combat power in key locations.

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PANEL 2: THE EVOLVING ROLE OF SEAPOWER IN PEACETIME

MODERN PEACETIME NAVAL OPERATIONAL OBJECTIVES: EVOLVING THEORY, STRATEGY, DOCTRINE, AND FORCE STRUCTURE

Dr. Joseph DiRenzo III
Coast Guard Atlantic Area

A changing world has placed the modern navies of the world in a unique position. Naval missions, strategic objectives and core capabilities like forward presence, deterrence, sea control, power projection, maritime security, humanitarian assistance and disaster response have not changed to a great extent. Like in the past, fleet size and national objectives determine the country's ability and desire to maintain a forward presence in the global maritime domain.

The maritime transportation system continues to grow with new challenges on the horizon. Our growing global maritime commons will rely on secure movement of commerce, intermodal short sea shipping; a true alternative to rail or truck and a new focus on the Arctic continues to open for commerce. National objectives, theory, strategies, doctrine and force structure must also change. These focus changes will have direct implications on force structures and capabilities. It is critical to maintain a spiral development approach even under an austere budget framework. The need to build coalitions and operate in a joint environment will continue to be critical in mission execution.

This paper will review the issue through a lens that carefully balances the need for an uninterrupted and secure Maritime Transportation System (MTS) with the need to provide maritime resources in the wake of emergencies around the world, such as the 2011 Haiti earthquake. There are several areas that should serve as the foundational objectives for national priorities. These same areas should drive the theory and strategy development in peacetime beyond the traditional "war at sea" requirements. There is still a wide range of threats to address like terrorism, piracy, transnational crime the capabilities of other nations with different interests and objectives. The primary focus of the service will still be to fight and win wars, however, greater emphasis needs to be placed on these focus areas during peacetime:

- ♦ Secure Maritime Commerce Facilitation Within the Global Commons
- ♦ Security for Maritime Located Energy Infrastructure
- ♦ Planned Proactive Nation Building

When combined these three focus areas provide a foundation for these considerations that can be expanded or retracted depending on world events.

The dominant focus area is secure maritime commerce facilitation within the maritime global commons. Why? The figures speak for themselves. Maritime shipping has become so dominant it is truly the center of gravity within the national economic framework of a majority of nations. A major disruption would be disastrous. According to the U.S Department of Commerce, "The Marine Transportation System transports the products that American businesses and residents use every day. By value, vessels carry 53 and 38 percent of U.S. imports and exports, respectively — the largest share of any mode." Naval Doctrine Publication One (NDP 1) underscores the importance of this issue, and the implications for theory and strategy, "We cannot permit conditions under which Naval Forces are impeded in freedom of maneuver and free of access, nor permit an adversary to disrupt the global supply chain by attempting to block vital sea lines of communications and commerce".

Author Rose George captured the impact of the MTS in her book, "Ninety Percent of Everything: Inside Shipping, the invisible industry that puts clothes on your back, gas in your car, and food on your plate." George wrote, "Shipping is so cheap that it makes more financial sense for Scottish cod to be sent 10,000 miles to China to be filleted, then sent back to Scottish shops and restaurants, than to pay Scottish filleters."

Retired Navy Capt. Brian Wilson reinforced the need for a secure MTS, and the need for the Navy to ensure this is a key peacetime objective, "Protecting the 11,000 oil and chemical tankers and approximately 1,500 gas tankers, among other vessels that are part of the world merchant fleet, is the maritime energy security challenge." The objective is nearly the same as it was in the days of John Paul Jones or Lord Nelson. Maritime commerce must be secure in its transit. It does not matter if you are operating in the Arctic, the Straits of Hormuz or off the coast of Somalia.

Following close on the heels of the first focus area, and tied directly to a nation-state's economic well-being, is security for maritime located energy infrastructure. Consider the exponential planned growth in offshore wind farms, the location of newly discovered oil deposits within our EEZ, the mega

infrastructure involved in the Louisiana Off-Shore Oil Platforms or LOOP, and the growing understanding of the energy potential in the Arctic. Dr. Raphael F. Perl, the Head of OSCE Action Against Terrorism Unit noted that “Energy security is among the most serious security and economic challenges, both today and in the future. As the economies of the world grow and societies develop, so does the importance of energy. And so does the importance of the infrastructures that produce and supply this energy.” The implications of this objective are significant and there is no approved Navy doctrine or strategy that applies to this issue. There is also no common TTP that developed for security ops around energy infrastructure within the U.S. EEZ. However, the importance cannot be understated. Former U.S. Secretary of Energy Spencer Abraham noted, “Failure to meet increasing energy demand with increased energy supplies, and vulnerability to disruptions from natural or malevolent causes could threaten our nation’s economic prosperity, alter the way we live our lives, and threaten our national security.”

A third objective, which requires enhanced naval strategy and doctrine development is Planned Proactive Nation Building. When USNS Comfort sails into a South American port with a floating hospital with capabilities equal to most mid-sized hospitals in America the impacts are overwhelming – bringing visible health assistance, training and lifesaving procedures. The COMFORT and its’ sister ship MERCY are iconic symbols of the United States and its’ people. Their presence in a foreign developing country’s port promotes nation building but with a mission far removed from security related operations. NDP-1 provides a foundation for greater emphasis on this mission noting, “Building on relationships forged in times of calm, we continue to mitigate human suffering as the vanguard of interagency and multinational efforts, both in a deliberate, proactive fashion and in response to crisis. Human suffering moves the United States to act, and the expeditionary character of naval forces uniquely positions them to provide assistance.”

Likewise, when a Seabee Battalion builds a school in a underdeveloped nation, the community and people feel the positive impact for decades. This is made even more powerful if the Seabees get local contractors involved. Labeled “soft power” by politicians and pundits alike the impact is significant to the overall readiness of the fleet. Noted the Center for Security and International Studies in a March 2013 report, “the Navy’s investment in proactive humanitarian operations have improved its disaster response capabilities, most notably by establishing working relationships in countries prone to natural disasters and by building stronger partnerships with humanitarian NGOs.” However, the objectives of this mission must be clearly tied to the National Security Strategy in a way that leaves little room for discussion or debate. This objective touches the lives of nations around the world and reinforces a key component of the U.S. culture – which highlights generosity and good will.

Collectively these three mission focuses should provide a strong foundation for the further peacetime development of enhanced naval theory, strategy and doctrine. But, what about force structure? How would this change in emphasis impact force structure? Three thoughts to consider:

- (1) For security of the MTS and energy infrastructure protection naval combatants including DDGs and LCS have never been more important. Fast, maneuverable vessels are imperative. Their use and application to this mission must be considered.
- (2) For the Arctic region, the Navy may look to take a bigger role in developing an Arctic combatant that can sustain operations. This doesn’t mean a Navy icebreaker fleet. That role is clearly the U.S. Coast Guard’s and should remain so. However, as reported in the January 2013 Naval-Technology.com, “Norwegian Institute for Defense Studies’ research fellow Amund Lundesgaard points out, “No navies have ice capable combat ships, and as far as I know, there are no plans to build such ships either. Consequently, naval presence in the arctic will be seasonal for decades to come.” This may re-enforce an expanded role for SSNs in Arctic operations. Their stealth, power projection and lethal capability are a perfect match for these types of security missions.
- (3) Capabilities available in the event of a major disaster.

Obviously, a lot of work needs to be conducted to balance new or refocused requirements with standing requirements. Notwithstanding the amount of risk, each service (and Armed Forces) is willing to accept. What this scenario does provide is a wonderful opportunity for rigorous debate, scholarly research, peer review and disruptive thinking. The decisions made now will have impact for decades to come.

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PANEL 2: THE EVOLVING ROLE OF SEAPOWER IN PEACETIME

THE EVOLVING ROLE OF SEAPOWER IN PEACETIME: BAD TIMES FOLLOW GOOD

Dr. Martin Murphy
Dalhousie University

Bad times follow good. If history teaches us anything it teaches us that.

As bad and good are two sides of a single coin so are peace and war. Peace is the absence of war; war the absence of peace. But even that distinction is no longer as clear-cut as we once thought it was. Even as redoubtable a Clausewitzian as Colin Grey talks about war within peace; the idea that we are now living in an era when war and peace exist alongside each other not merely in time but also in space.

War is changing its character or its nature?

The riposte has been that while war essential nature is immutable its character is always in flux. Oxford's 'Changing Character of War Program' certainly reached that conclusion. But now, here in the U.S., we have a 'Future of War' program whose members point out that sustained cyber-war appears capable, potentially at least, of bringing any advanced society to its knees. The effect would arguably be greater than a blockade, which is a recognized act of war, but cyber-war achieves its effects without direct violence, something that Clausewitz saw as war's essential characteristic.

I raise these issues because, clearly, I am uncomfortable with the distinction between peace and war to the point where I am uncomfortable with the exam question I have been set. This may come as a surprise to those who know me as something a specialist on the subject of piracy, a challenge that few in the navy would regard as 'war-like.'

Piracy's early warning

It would be pointless to deny that the Navy has many other calls on its shrinking resources. It is therefore tempting to view piracy suppression as a low priority despite the fact that the *Cooperative Strategy for 21st-Century Seapower* (CS21) assigned it – and other 'system administration' functions – greater importance. Within that context some have suggested that piracy – and here we are talking about piracy off Somalia – should be a Navy mission because of its economic consequences. I have always been skeptical of this argument; assigning a figure to acts of disorder above or below which action should or should not be taken. The arguments are necessarily more complex than that. The sum total of human wealth lost to Somalia piracy doesn't add up to a hill of beans. My concern has always been that it is a 'canary in the mine shaft'; a signal about perturbations in the international system that we need to recognize and respond to on a scale commensurate with their geo-strategic importance. Specifically, and a lesson not to be lost, is that piracy and counter-piracy have always provided states with an opening to change the international order to their advantage.

A new narrative

Since the end of the Cold War we have lacked an over-arching narrative that explains what we as a nation, and we, as broader Western civilization do that justify the actions we take on the global stage. In fact I think it's the same as it has been for most of the last century, which was why the proclamation of a 'New World Order' never rang true. The narrative was always about Western values, of freedom tempered by law, of representation disciplined by responsibility, and the economic rewards that flow from the so-called negative freedoms that these values and supporting structures protect. There have always been two (at least two) dimensions to this narrative; the exalted and the mundane. For long periods the exalted made the mundane bearable. The exalted generally inspired and was worth fighting for while the mundane was, well, mundane and apparently not worth dying for. The mundane, however, was the day-to-day functioning system that tied everything else together. Without it nothing worked. By the system I mean commerce and the financial and monetary arrangements that facilitate exchange. The sea is the vital medium. The international legal and security arrangements that make free and secure passage over it

possible are components of the system and of central importance to its efficient working. We and to date remain the guardians of both the system overall and its maritime component.

I can't say we have managed the system well over the past twenty years, largely because we haven't managed our own economies well. The mistakes that have been made – many stemming from a misplaced belief that geopolitical reality had been suspended after the fall of the Berlin Wall - have put enormous strains on it: the growth of U.S. public debt, the exponential rise in welfare and the lunacy of the euro are possibly the most egregious examples. Our recent attempts to cushion the effects of these misjudgments using almost solely monetary means (analogous to fighting two wars without raising specific taxes or bonds), when combined with China's long-standing under-valuation of its currency, appear to have distorted price signals across the globe.

Mahan, commerce and “command of the sea”

There is nothing new in my argument about the importance of either the system or its maritime component. Alfred Thayer Mahan emphasized the importance of commerce. He wrote about the vital importance of a merchant marine and even asserted that the “necessity of a navy...springs, therefore, from the existence of a peaceful shipping, and disappears with it...”¹ He was also the first to talk about “command of the sea”, which Professor Ruble has urged us to look at again, something that is vitally important for peace as well as war. Since Mahan's death “command of the sea” has come to be seen primarily in naval rather than maritime terms, a process that been accelerated by mid-century factors that may now have lost their relevance.

This concentration on the naval rather than the maritime has meant that, for us, ‘freedom of navigation’ has been primarily about ensuring the uninhibited movement of naval vessels on the high seas, through international straits and close enough to foreign coasts to gain access if required. We have viewed commercial maritime freedom as demanding less of our attention because we see it is a self-evident good which everyone has an interest in sustaining. Or perhaps as another “lesser included”; if naval ships can pass then axiomatically the seas are free for other users. Either may be true, although no system, however robust, is indestructible. We, however, do not appear to be alarmed. In fact we are so confident that the mutual self-interest of others will sustain the system that we have not ratified UNCLOS, our own creation, nor have we committed either intellectual or naval force to help protect it, a short-coming that the Somali pirates exposed.

It is no longer the case, as it was in Mahan's day, that a merchant marine is a measure of national power. Our belief in national self-determination, in free trade, the spread of both, and the ‘flagging-out’ process that has arisen as a consequence which has been adopted by most major trading nations, has clearly affected our view of maritime power, and our responsibility to protect maritime commerce. Despite this we continue, for the most part, to define our national self-interest in ways very similar to Mahan; a position that was almost certainly reinforced by the particular circumstances of the Cold War. Our opponent then had relatively insignificant external trade and a limited merchant marine. There was no point in hunting it down. Merchant ship protection was focused on the North Atlantic convoy battle. The expectation was that any contest would be short.

Different worlds

That is not the situation we are facing now. In fact we are facing almost its complete opposite. Our belief in the efficacy (and perhaps the inevitability) of battle remains as strong as ever, even as our ability to conceptualize “war” has grown weaker and the line between war and peace grown fainter. The one opponent we face that could revise the global political and economic order to our disadvantage is vastly better resourced than the Soviet Union ever was. Yet because its economic system appears closer to our own we appear to believe that it will, ineluctably, fall into line with our system and play by our rules. We openly question whether or not its leadership *really* still believes in its own ideology.

The likelihood is that it does and aims to change the global system to its advantage just as we did when we were in a similar position. After all we have been here before; only the positions were reversed. Not against the Soviet Union but when we opposed Great Britain. The transition that took place between 1943 and 1945, which was not limited to military power but included a reordering of the world economic

¹ Alfred Thayer Mahan. *The Influence of Sea Power upon History, 1660-1783*. New York: Dover Publications, 1987, p. 26.

system, was largely benign. We and Germany had between us destroyed Britain's empire. However, there was sufficient overlap in terms of economic philosophy, political values, law, and mutual self-interest that the losing party lost little face. That planetary alignment will not occur again.

What is the navy's evolving peacetime role?

What, therefore, is the Navy's evolving peacetime role? I have painted a big picture using very broad brushstrokes. I will paint the Navy's role similarly. Above all it is not to prepare for war but to recognize that we are engaged in a competition that amounts to war, and more than naval war narrowly defined. This is not a contest about norms; it is about geopolitics. The Navy Department (with the Coast Guard) sits front and center of this competition because the global maritime system lies at the heart of the global commercial system. Consequently, a competitive national strategy involving all strands of national power, focused on "command of the sea" as a political and economic as well a military space, sums up very well what needs to be achieved.

Professor Rubel has argued the naval case for this very eloquently. I would simply reiterate that "command" needs to be more broadly maritime. Much of what is required has been laid out in CS21. But not all; competitive strategies are more broadly based than that. It is about convincing allies that we are the system's protectors and will work with them to achieve that goal. Importantly, system protection does not involve tolerating players who exploit the system to their advantage when and where it suits them but work to change it fundamentally when and where it does not. Freedom of navigation is non-negotiable; states around the world are willing to support us on this. We need to take steps to control the world's maritime chokepoints, or be able to take control of them quickly if we have to. Above all the navy has to understand the world's commercial system and know where and how to exert pressure on the working of that system whenever and wherever it has to, in concert with other transactional pressures exerted by other agencies and government departments. Not all the weapons and tactics the Navy will need to understand and, in some circumstances deploy, will be conventionally naval. We need to be able to dissuade or deter any user of the system that seeks to revise it in ways that will permanently undermine its workings. Our values as well as our prosperity depend on it. Interestingly, the talks under way at the moment to create a Trans-Pacific Partnership (TPP) and a North Atlantic (European-North American) free trade area are steps in the right direction. NATO is broadly aligned with the prospective North Atlantic free trade area. Perhaps the Navy needs to think about how trade and maritime defense could be aligned similarly, but more loosely, with all the prospective members of the TPP.

PANEL 3: NAVAL STRATEGISTS' PERSPECTIVES

UNITED STATES NAVAL CONTRIBUTIONS TO MARITIME SECURITY IN THE GULF OF GUINEA

Lieutenant Commander Gregory C. Keeney, U.S. Navy
U.S. Naval War College

In this century, countries benefit from healthy, prosperous, confident partners. Weak and troubled nations export their ills – problems like economic instability and illegal immigration, and crime and terrorism. America and others... understand that healthy and prosperous nations export and import goods and services that help stabilize regions and add security to every nation.

President George W. Bush November 20, 2004

To that end, the safety and economic prosperity, in this age of globalization, of the United States has come to rely in large part on the continued secure use of the planet's oceans. Therefore, the United States, by necessity, must take a vital interest in maritime security. In today's economy, the security of those oceans has continued to increase in importance as more and more nations continue to participate in the global marketplace made possible by the sea lines of commerce. Over 80 percent of the world's trade travels via water, creating what can only be described as a maritime chain spanning four principal geographical regions – Atlantic, Arctic, Indian, and Pacific. Approximately half of the world's trade by volume and 90 percent of general cargo is transported in shipping containers, making the maritime domain the heart of the global economy. However, it is an indisputable fact that navies are expensive, and in the case of the United States Navy, exceptionally expensive. A quick review of the world defense-spending database would reveal that over 40 coastal nations entire defense budgets would not buy a single *Arleigh Burke*-class destroyer. With this type of disparity in naval spending among maritime nations, and in an era of vastly declining defense budgets, it can only be concluded that not all nations equally value maritime security. The 2007 National Strategy for Maritime Security places emphasis on war fighting first, as it should, however, much attention is also paid to the cooperative and international nature of maritime power. Hence the question, what does the U.S. Navy's contribution to this "cooperation" look like when applied to the Gulf of Guinea?

Economic Impact of Illicit and Illegal activity in the Gulf of Guinea

The seas surrounding the west coast of Africa, known as the Gulf of Guinea, which extends from Cape Lopez, Gabon, to Cape Palmas in Liberia, poses a potential threat to international security and the global economy according to the United Nations' Security Council, as evidenced in Resolutions 2018 and 2039, adopted in 2011 and 2012 respectfully. The semantic limitations of "piracy," however, as defined by the United Nations, i.e. illegal acts occurring on the high seas - creates a void on how to defend against those same acts that occur within the territorial waters of a state, or states such as within the Gulf of Guinea. Nigeria alone is estimated to have lost \$1 billion of crude oil every month from piracy and oil bunkering. In addition to piracy raising the concerns of the international community, the dangers posed by narcotic, illegal arms, and human trafficking in the Gulf of Guinea has also become an area of focus. A 2008 report by the UN Office of Drugs and Crime (UNODC) estimated that 50 tons of cocaine was entering West Africa yearly then transported to Europe where the drug sold for almost US\$2 billion. Illegal, Unreported and Unregulated (IUU) fishing occurring in the Gulf of Guinea is also an area of concern to African states. According to a study funded jointly by the United Kingdom government and the Pew Charitable trusts, illegal fishing costs between \$10 and \$23 billion annually. Considering this impact on the global economy that these losses cause, not to mention the direct impact on the lives of the local populations, these maritime security issues must be addressed. In addition, it is important to note that the U.S. alone is expected to import a quarter of its oil from Gulf of Guinea nations by 2015. For these reasons, and more, the strategic importance of the Gulf of Guinea and addressing piracy concerns cannot be overlooked.

Why is the Gulf of Guinea important?

- ♦ *Geographical location:* It is an important maritime route for commercial shipping from Europe and America to West, Central and Southern Africa. Its proximity to Europe and North America for the transportation of crude oil from the region further raises its importance in the global supply of energy.
- ♦ *A major source of hydrocarbon resources:* The region produces approximately 5.4 million barrels of crude oil per day. The United States sources 15% of its supplies from the Gulf of Guinea, and China and Japan depend on it for a substantial amount of their oil and gas needs.
- ♦ *Investment:* Oil companies from the West and the East have made huge investments in both onshore and offshore drilling. The region has the fastest rate of discovery of new oil reserves in the world, thus attracting new investments for further exploration.
- ♦ *Rich fishing and other marine resources:* Fishing trawlers come to the region from all over the world. Many are there illegally as a result of inadequate and inappropriate security checks.
- ♦ *Rich forestry, agricultural and mineral resources:* All these are exported through the Gulf of Guinea to markets in Europe and America.

What are the challenges faced?

- ♦ *Area:* The Gulf of Guinea is a vast expanse of water with weak surveillance and uncoordinated security patrols. An over- concentration on land security in the region over a long period of time has left the maritime domain unpatrolled.
- ♦ *Economic:* There has been increased incidence of armed robbery at sea and piracy; theft of hydrocarbon resources on the high seas/illegal bunkering; pipeline vandalism; illegal trafficking in arms, drugs and persons; and illegal unreported and unregulated fishing in the waters of the region.
- ♦ *Political:* The maritime domain becomes a good breeding ground for dissent to grow and fester, with devastating effects on the home governments of dissidents. One specific political challenge is poverty among the host communities of the rich natural resources of the region.
- ♦ *Legal:* There are unclear definitions of piracy and armed robbery at sea, as well as an inadequate legal framework for prosecuting criminals when intercepted.

The United States Navy's Contribution

In an effort to encourage discussion this portion of the presentation, much like the Gulf of Guinea itself, is purposely left ambiguous. One could argue that addressing security assistance ashore is where DOD best addresses the aforementioned maritime security concerns. However, it could also be argued that a Joint Integrated Agency Task Force (JIATF) much like JIATF South working the narcotics trafficking problem in the Gulf of Mexico, is a model that may work in the Gulf of Guinea. Regardless, the point is that with the number of Africans, unions, nations, organizations, and corporations vested in continued security of the maritime commons in the Gulf of Guinea, the solution sets available are as diverse as all of them combined, which may be contributing to the concerns themselves?

PANEL 3: NAVAL STRATEGISTS' PERSPECTIVES

U.S. ENERGY INDEPENDENCE AND IMPLICATIONS FOR MARITIME STRATEGY

Commander Christian D. Boll, U.S. Navy
U.S. Naval War College

Recent technological advances and changing market conditions have led to a boom in U.S. domestic oil and natural gas production. Horizontal drilling technology, hydraulic fracturing techniques and advanced geological imaging software are the primary technological innovations driving the increased production of oil and gas in tight formations like shale. The spikes in oil and gas prices of the mid-2000s, coupled with a robust energy futures market in the United States, made these resources economically recoverable, as higher prices allowed entrepreneurs to raise startup capital and expand exploration and recovery operations. The rapid expansion of domestic oil and natural gas has continued; even as oil prices have stabilized to some degree and natural gas prices have declined precipitously over the past six years. Shale oil production has grown 26% per year since 2004 and total recoverable shale oil estimates have increased from 4 billion barrels in 2007 to 33 billion barrels in 2010. Various estimates predict that shale oil will account for 12-30% of total U.S. oil production by 2035.

As a result of this rapid growth in domestic production, many governmental, industry and scholarly studies predict that the United States will become a net exporter of energy by the mid-2020s. This change in energy production and improved balance of trade will allow the U.S. to reexamine its national security interests in energy producing regions such as the Middle East, West Africa and Russia. The United States will also be able to reconsider its maritime strategy as the primary security provider in the maritime commons linked to the petroleum trade; the Persian Gulf, the Gulf of Aden and the South China Sea, for example. Examining how the changing petroleum market may affect our allies and competitors will determine if and how the U.S. could change its maritime strategy.

Implications of Shale Oil for the Global Economy

Shale oil formations are not unique to the United States. Various governmental and institutional studies predict that technically recoverable shale oil and natural gas are present in many regions around the world, including South America, China, Australia, Russia and the Middle East. However, matching the technical and financial conditions that have propelled the boom in U.S. production is unlikely in those regions, at least in the near future. If global shale oil resources cannot be exploited at the same rate as in the U.S., global oil production is predicted to rise slowly over the next 20 years, and oil prices will also rise slowly, from around \$100 per barrel in 2014 to \$130 per barrel in 2035. In this case, the traditional oil exporting countries would benefit from the higher prices and import dependent countries, including U.S. allies in Europe and the East Asia, would lose. In short, the current status quo would be maintained.

If, however, shale oil can be extracted worldwide at the same rate as conservative estimates for the U.S., 12% of total production, adding 14 million barrels per day to total global oil production, real oil prices could fall 25% or more by 2035. In this scenario, import dependent nations would realize the greatest economic benefits, while major exporters like Russia and the OPEC nations would suffer from large trade imbalances and declining Gross Domestic Products (GDP), further destabilizing these regions. OPEC could lower production in an attempt to keep oil prices higher, or the cartel could crumble as member nations sought to maximize their own revenues. That could lead to a regional maritime conflict similar to the Tanker Wars between Iran and Iraq. If the United States were no longer dependent on Middle-East oil, the burden of intervention in such a conflict could be shifted to import dependent nations. While such an approach would allow the U.S. to reduce naval presence in the maritime commons, increasing tensions between our treaty allies and competitors like China and Russia could threaten U.S. national security interests. Even if the United States were oil supply independent, instability in the world market would create price volatility in the domestic market.

Europe's Oil Supply

European Union nations import approximately 80% of the oil they consume. About 35% of Europe's oil imports come from Russia and former Soviet states. Another 24% is imported from North Africa. Only

about 14% of Europe's oil supply is imported from the Middle East. Given the relatively low percentage of European oil imported from the Middle East through contested waters, EU nations may not be willing to take on a larger role in providing common maritime security. If, however, the reliance on Russian imports becomes untenable, European nations may seek to diversify by importing more from the Middle East and Africa as U.S. imports from those regions decline.

Japan's Oil Supply

Japan is almost totally reliant on imported petroleum across all energy sectors, a condition exacerbated by the shutdown of the nation's nuclear power plants after the Fukushima disaster. Japan is currently the world's third largest importer of oil, with 83% coming from the Middle East. While Japan seeks to reduce this reliance by importing more oil from Russia, West Africa and Malaysia, that oil would still be transported at sea through the contested waters of Southeast Asia. The U.S. could encourage Japan to take a more active role in providing security in the global maritime commons but a buildup of Japanese naval strength would be viewed as a threat by China. Such a change would also require the political and popular will to change Japan's constitutional restrictions on military force structure.

China's Oil Supply

China currently imports about 60% of the oil it consumes, a figure that continues to rise with consumer and industrial demand. China will surpass the United States as the world's largest oil importer sometime this year, and is the single largest importer of Middle Eastern oil. The U.S. is paying for maritime security in the Persian Gulf to ensure the flow of a commodity that increasingly benefits a potential adversary and decreasingly benefits the U.S. directly. Yet China has sought assurances from Washington that the U.S. will continue providing security in the region as China doesn't have the naval assets to do the job. If U.S. opts for a future maritime strategy that reduces our commitments to this region, China may be compelled to increase its military capacity, which would have destabilizing effects on our allies and partners in the Middle East and East Asian regions.

PANEL 3: NAVAL STRATEGISTS' PERSPECTIVES

REGIONAL APPLICATION: PERSIAN GULF

Lieutenant Erik Figueroa, U.S. Navy
U.S. Naval War College

In March of 2013, the Islamic Republic of Iran Navy (IRIN) completed a deployment to the South China Sea where it held port calls in Sri Lanka and China, in what appears to be a demonstration to the world that it has the ability to engage with strategic partners outside of its home waters¹ and that its ships are in good material condition, possessing the long range maintenance and supply capabilities to deploy long distances.² This is significant because it indicates that the Iranian government has decided to invest in blue water capabilities. A modest behavioral change considering that Iran has invested primarily in the Islamic Revolutionary Guard Corps Navy (IRGCN) and its asymmetric maritime strategy, relying on small boats, mines, mini-submarines, and anti-ship missiles. The increasing frequency of IRIN deployment suggests that the Iranian regime recognizes the importance of the IRIN and its place in shaping Iran's greater maritime strategy. This renewed attention on the IRIN by the governing regime may provide the U.S. with a rational actor by which a long-term interaction may be established in order to shape Iranian behavior in strategic competition.

Different Navies, Different Strategic Purpose

Iranian defeat in the Tanker War between 1984 – 1988 forced the Iranians to develop the asymmetric strategy that they are known for today. Iran's maritime strategy is predicated on its ability to harass commercial shipping in the Persian Gulf, close or limit the flow of traffic through the Strait of Hormuz, and produce grave losses to American maritime forces. Iran hopes to utilize a "fourth generation of war", what Colonel Thomas Hammes wrote in his book *The Sling and the Stone*, "...does not attempt to win by defeating the enemies military forces. Instead it directly attacks the minds of enemy decision makers to destroy the enemy's will."³ It is Iran's maritime strategy to induce "economic pressure" against the U.S. and its allies by threatening the oil flow from the Persian Gulf.⁴

Prior to 2007, the IRGCN and IRIN had overlapping roles in accomplishing this strategy; however, conflicts between the organizational cultures of the two entities resulted in an inability to execute joint maritime operations in the Persian Gulf. During the Tanker War in 1987, the Iranian government attempted to combine the two services but the IRGN refused to "cooperate and subordinate its operations under single command."⁵ The IRGCN viewed the IRIN as "too conservative" and Western leaning, while the IRIN considered the IRGCN as a band of untrained and undisciplined amateurs.⁶ Thus, in 2007, the Iranian government separated the two organizations and gave them each a distinct strategic purposes and domains. The IRGCN remained responsible for the security of Iran's maritime interests inside the Persian Gulf,⁷ while the IRIN would operate beyond the Gulf and "focus on a broader role designed to expand Iranian influence and increase leverage in the region at the expense of the West."⁸

IRIN, Iran's Professional Navy

An IRIN with greater activity in Iranian strategic policy is favorable to the U.S. because its professional military nature lends itself to more predictable and less confrontational interaction. An apolitical organization, the IRIN is a "national institution, created and maintained to defend the nation against external

¹ Christopher Harmer, "Iranian Naval and Maritime Strategy," *Institute for the Study of War*, 2013, pg 21

² Ibid.

³ "Iran's Naval Forces", *Office of Naval Intelligence*, Fall 2009. Pg 10.)

⁴ David B Crist, "A History of U.S.-Iran Confrontation at Sea," *The Washington Institute for Near East Policy*, June 2009, pg 23.

⁵ Crist, pg 15.

⁶ Ibid

⁷ Joshua Himes, "Iran's Two Navies," *Institute for the Study of War*, October 2011. Accessed February 12, 2014, http://www.understandingwar.org/sites/default/files/IRans_Two_Navies.pdf. Pg 12

⁸ Ibid, pg 17.

threats.”⁹ Thus, the national character of the IRIN whose senior officer corps is composed of remnants of the Shah’s navy, was modeled after the West, and from which it received most of its training has resulted in a navy that exhibits the behavior of other professional navies operating on the high seas.¹⁰ In December 2011 the Iranian navy conducted a 10 day exercise called Velayat 90, demonstrating its offensive and defensive naval capabilities, during which U.S. Fifth Fleet acknowledged that “interaction with the regular Iranian Navy continues to be within standards of maritime practice, routine and professional.”¹¹

Conversely the IRGCN’s character has been more unpredictable, and although subordinate to Iran’s national security establishment, the greater IRGC is responsible for the defense of the revolutionary regime not the state. The IRGCN is a “guerilla force at sea” whose rank relationships are “less hierarchical.” Most IRGN personnel are conscripts drafted off the streets or volunteers who enlisted because the training was less vigorous and lifestyle less formal.¹² The IRGCN’s unprofessional and independent behavior could produce an incident that could spiral into conflict.¹³ For example in July 1987, the Japanese Foreign Minister was assured by Ayatollah Ali Akbar Rafsanjani, then the Speaker of the Majls, that no Japanese shipping would be attacked; however, IRGCN officers, acting independently, attacked two Japanese tankers.¹⁴

Strategic Effects

Using various forms of long-term military interaction with the IRIN the U.S. might induce some significant strategic effects. Engagement with the IRIN using Confidence Building Measures (CBM) could be a legitimate “conduit to Tehran.”¹⁵ In April 2007, the Stanley Foundation held a conference in which international participants (including Iran and the U.S) and concluded that Iran, the U.S., and the Arab states should “identify common operational and incremental problems that could be appropriate starting points for CBMs” this would help develop a dialog between the U.S. and Iran and ease Gulf tension.¹⁶ Anti-piracy and Search and Rescue (SAR) are examples of potential CBMs between U.S. and Iranian Naval forces. In 2010 Iran sent a naval delegation to Djibouti to help support anti-piracy efforts off of Somalia;¹⁷ and in June of 2010, Iran’s military attaché in Turkey observed SAR exercises in the eastern Mediterranean Sea.¹⁸

Secondly, as Michael Connell and Eric V. Thompson have suggested recently, the U.S. Navy could re-posture its capital vessels outside of the Strait of Hormuz. This permanent change in force posture would reduce U.S. vulnerability to IRGCN capabilities, deflating the asymmetric threat, and forcing Iran to invest in IRIN blue water capabilities.¹⁹ This strategy is aimed at exploiting Iran’s weakness in range limited weapon systems, poor over the horizon (OTH) tracking and targeting capabilities, and reliance on a naval force structure suited for operations inside the Persian Gulf.²⁰ Additionally, a posture that threatened Iranian commercial shipping interest might further entice Iran to compete at this level. Drs. Connell and Thompson argue that by “shifting the focus” away from the Gulf, tensions might increase between the IRGCN and IRIN as they compete for limited resources.²¹ The U.S. could further encourage this divide by combining it with CBMs that require greater employment of IRIN maritime resources.

⁹ Ken Katzman, “The Artesh: Iran’s Marginalized Regular Military,” *Middle East Institute*, November 2011. Accessed February 26, 2014, http://www.aei.org/files/2011/11/28/-the-artesh-irans-marginalized-regular-military_171758621702.pdf, pg 10.

¹⁰ Crist, pg 15.

¹¹ Rick Gladstone, “Iran Navy to Hold War Games Near Crucial Sea Lanes,” *The New York Times*, December, 22, 2011.

Accessed, February 26, 2014, <http://www.nytimes.com/2011/12/23/world/middleeast/irans-navy-to-hold-war-games-near-key-sea-lanes.html>

¹² Ibid.

¹³ Himes, pg 22

¹⁴ Crist, pg 16

¹⁵ Himes, pg 23.

¹⁶ “The Future of Gulf Security,” *The Stanley Foundation in association with INEGMA and LNCV*, April 2007. Accessed February 26, 2013, <http://www.stanleyfoundation.org/publications/report/FutureGS1107.pdf>, pg 12-13.

¹⁷ Himes, pg 19.

¹⁸ Ibid, pg 20.

¹⁹ Dr. Michael P. Connell and Dr. Eric V. Thompson, “A Long-Term Competitive Strategy to Outflank Iran, *CNA*, October 2013, pg 27.

²⁰ Ibid, pg 29

²¹ Ibid, 31

PANEL 4: SHRINKING ICE CAPS, SHORTER SEA ROUTES, AND TRADE

GLOBAL CRUDE OIL MIGRATION

Ms. Sarah A. Emerson
ESAI Energy LLC

With moderate global economic growth, the global oil market will expand by a historically modest 10.0 million b/d or 11 percent by 2025. About half of that growth will remain inside the borders of North America. The combination of limited global growth in the supply and consumption of oil and comparatively large North American growth in supply is already having a significant impact on the flow of oil in the Atlantic Basin, and is contributing to a dramatic migration from West to East.

Within global energy trade, most of the energy transported across the sea is crude oil. There are also significant volumes of coal, liquefied natural gas and petroleum products, but the lion's share of seaborne trade is crude oil. The focus of this analysis is crude oil flows. Over the next ten to fifteen years, about 4.0 million b/d of crude oil trade will migrate from East to West. If the average crude oil tanker is carrying 2 million barrels of crude oil, that suggests that tanker traffic to the East could rise by more than 700 tankers by 2025 even as the flow to the West drops significantly.

There are several factors shaping this crude migration. The first and most publicized factor is the shale and oil sands growth in North America, which is backing out crude imports to the U.S., especially since crude exports from the U.S. are banned. The second is the energy reform underway in Mexico, which will lead to some foreign investment in Mexico's oil sector, and thus the eventual recovery in Mexico's crude oil production, especially in shale and offshore. The third factor is the decline in oil demand in Europe and more gradually in the United States as vehicle fuel economy standards are tightened and alternative fuels and renewable power chip away at oil use. The flip side of this factor is continuing growth in Asia, which will support imports there even as U.S. and European imports fall. Another factor is the location of new refining capacity. New or expanded capacity in the Middle East, Asia and Latin America is, and will continue to, contribute to the redirection of crude oil flows. Finally the growth in natural gas production and use in North America, the Middle East and Asia is changing the energy mix in ways that will lead to more natural gas liquids and liquefied natural gas, and thus displace more oil as feed stocks to power generation and petrochemical production.

North American Self-Sufficiency

The implications for trade flows from these developments can be divided into three categories. First, North America (including Mexico) is becoming increasingly self-sufficient in oil. Until the U.S. export ban is lifted and/or Canada succeeds in building new export capacity, the region will remain very well-supplied and will attract fewer and fewer imports, at least for a time.

Competition for the Asian Market

The second category of implications concerns the degree to which the Asia-Pacific region can absorb additional barrels from Africa, Latin America, the Middle East that are backed out of the U.S. and Europe. Along with these regions is the effort by Russia and other countries of the former Soviet Union to capture market share in Asia.

Specialty Trade

With so much change in the geography of oil production and oil demand, there are some specialty trade flows that will be driven by arbitrage and infrastructure. For example, the development of Canada's oil sands will depend on the degree to which Canada can reach customers other than the United States. Efforts to build pipeline and rail transport to the Western or Eastern coasts will be critical to flows out of the Northern half of North America through either the Atlantic or the Pacific. At the moment, my analysis suggests a volume of about 400,000 b/d will be routinely exported beyond the U.S. by 2025. If all pipelines are built and fully operational, that number could be higher, but would require significantly faster development of the oil sands in the meantime.

Another “specialty” trade flow is bound to be the reduction and then the recovery in Middle Eastern flows to Europe. With the embargo on Iranian imports and the decline in demand, Europe’s import of Middle Eastern crude has fallen from 2.8 million b/d in 2008 to 1.5 million b/d in 2013. It is likely that as more Russian crude heads to Asia, and Iranian sanctions are eventually lifted, Middle East flows to Europe will bottom out and recover.

Conclusions for Seaborne Flows in the Next Decade

These three categories of trade flows will impact commercial seaborne traffic. The most profound impact over the next 10 years will be the aforementioned shift of flows from Westbound to Eastbound routes. Notably, after 10 years, westbound flows out of the Persian Gulf may recover as the North American oil boom slows and U.S. production plateaus. Even with gently falling oil demand in Europe and the U.S., the marginal source of crude oil will again be the Persian Gulf. Finally, Canada’s oil industry will increasingly depend on exporting beyond the United States, and it seems exporting out of the East may be easier than out of the West. Yet, most of the non-U.S. demand may be in Asia, so an Arctic trade route from Eastern Canada may become quite central to the size and longevity of the Canadian oil sector.

After 2025

This brief has focused on the next 10-15 years, but looking further into the future there are key trends that will endure and continue to influence crude oil trade flows. First and foremost, oil demand will continue to decline in the U.S., Europe and OECD Asia and continue to grow, albeit slowly, in the rest of the world. Production costs will remain lowest in the Persian Gulf countries; natural gas production and use will continue to grow. These trends will keep the focus of crude oil flows primarily East of Suez even beyond 2025. They will also encourage the rise of seaborne LNG trade flows, again with an Eastbound emphasis.

PANEL 4: SHRINKING ICE CAPS, SHORTER SEA ROUTES, AND TRADE

ADOPTING A COOPERATIVE STRATEGY TO MANAGE THE RISK IN THE ARCTIC

Captain C. Clark Bone, U.S. Navy
Atlantic Council

The continued diminishment of Arctic summer ice offers a myriad of opportunities and challenges for countries of the region. The opportunities include a shorter maritime trade route between Asia and Europe, access to untapped oil, natural gas, and minerals, expands fishing grounds, and further opens the region to tourism. It also requires the littoral countries to develop a mechanism on how to manage and safeguard this new common space. This paper provides the rationale on why the Arctic nations should collaborate with each other to develop the Arctic rather than individual attempts to concentrate solely on their own portions of the region.

Current estimates expect the Arctic waters will be sufficiently ice-free during the summer season to support maritime trade along the Northern Sea Route within the next 10-12 years and sufficiently ice-free enough for seasonal use of the trans-polar route after 2030¹. Coincident with the current diminishment is the expectation that human activity will continue to increase annually. In order to be prepared for an environmental or humanitarian incident, the powers in the region need to start preparing now. The Arctic countries (United States, Canada, Russia, Norway, Denmark, Iceland, Finland, and Sweden) can reduce risk to the development of the region through a comprehensive and collaborative strategy that encourages economic development and provides stability.

Shared Vision

A comparison of the Arctic nations' strategies reveals that they all share similar goals and objectives². They are uniform in the need to retain sovereignty over their waters and Economic Exclusion Zones while acknowledging the role of the Arctic Council as the lead international organization regarding the Arctic. However, by eschewing military or security matters, the Arctic Council is deferring to individual countries to determine their own approaches to stability. It is passing on the best opportunity to ensure the region remains peaceful and economically viable.

The littoral nations all see economic benefit in being able to access the oil, natural gas or mineral deposits, but acknowledge balancing it with environmental protection. Some countries specifically mention the role of the military, but all predict that the Arctic, as a region, possesses a low likelihood of conflict. Most importantly, they all recognize the need for international cooperation. Cooperation is critical to the safe exploitation of the natural resources, the ability of shipping to utilize the Arctic for maritime trade, and to ensure that the Arctic remains free from conflict. Their shared visions are a realization that the size of the Arctic's common space makes it very difficult for any one country to meet its governance requirements on its own.

Shared Challenges

Each Arctic country has the opportunity to take advantage of the natural resources that are becoming accessible, but doing so requires extensive funding. Due to ice coverage, much of the existing development in the region supports smaller population centers or scientific research and often only is useable during certain seasons. As such, the present infrastructure is not sufficient to support long-term exploitation of natural resources or large disaster relief operation. Airfields, roads, and harbors, are not robust enough in most of the region³. As an example of how much development costs, Russia is spending \$63 billion over the next 6 years for Arctic infrastructure development⁴.

In addition to new economic opportunities, the Arctic countries are inheriting the responsibility to manage the expansive waterspace. As the ice melts, human traffic will increase, necessitating the need to

¹United States Navy, "U.S. Navy Arctic Strategy," February 2014. p13.

²Arctic Council, "Arctic Strategies" <http://www.arctic-council.org/index.php/en/document-archive/category/12-arctic-strategies>, accessed on 27 October, 2013

³Tom Revell, "Arctic Nations Unprepared for Major Shipwreck, Study Says," *Blue and Green Tomorrow*, February 16, 2014, <http://blueandgreentomorrow.com/2014/02/16/arctic-nations-unprepared-for-major-shipwreck-study-claims/>. Accessed 18 February 2014

⁴Russia to Spend \$63Bln on Arctic Development, *RIANovosti*, October 18, 2013, <http://en.ria.ru/russia/20131018/184229080/Russia-to-Spend-63-Bln-on-Arctic-Development-Program.html?id=,> accessed January 10 20143.

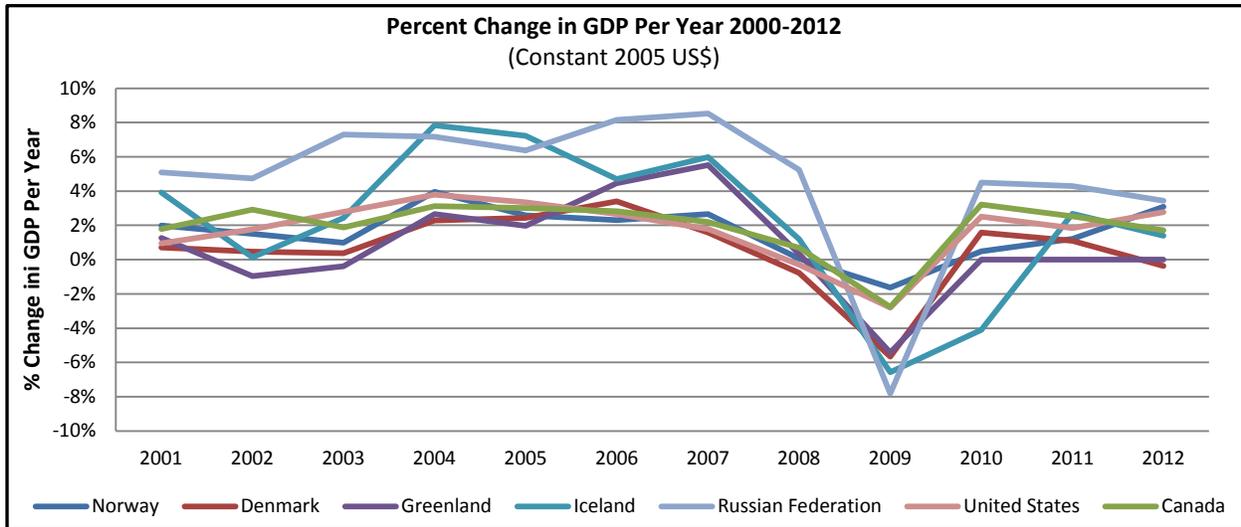


Figure 1: Comparison of Arctic Nation Economies (World Bank 2013)

develop and manage governance mechanisms and capabilities. With the exception of Norway and the United States, the global economic slowdown of 2012 has hampered the ability of the Arctic nations to recover from the 2009 global recession⁵.

In its 2013 World Economic Outlook, the International Monetary Fund forecasts growth for the Arctic nations. However, that growth will remain between 1-3% for most of the countries⁶. The lure of oil, natural gas, uranium and other minerals, and new shipping lanes all offer economic promise. Accessing these natural resources is not without high costs and risks. After spending \$6 billion over a 10-year period, Royal Dutch Shell abandoned its oil drilling efforts in the Chukchi and Beaufort seas last year⁷. The cost of operating in the Arctic environment, environmental regulations, and lack of support infrastructure led to Shell questioning the economic benefits of the venture and the risks involved.

Reducing the Shared Risk

The requirement for Arctic development during current economic conditions should drive the countries in the region to look at cost effective approaches to the Arctic. The commonalities in strategies provides a foundation in which the countries can work together to reach their individual goals. By collaborating and sharing the cost while reducing waste and duplication of effort, they can develop the Arctic, take advantage of the new opportunities, and reduce the risks. A shared and interdependent approach decreases the likelihood of Arctic nations introducing conflict or unfair economic competition, as a nation who did so would lose the gains from burden sharing and be required to shoulder the cost and risks alone.

In order to develop the region to a point that the littoral Arctic nations can realize any economic gain, agreements are required in three areas to create a safe and stable Arctic: requisite authorities for management, the necessary infrastructure to support arctic operations, and the development of the unique capabilities required to oversee and police this new common space.

Authorities: There has been great progress made at the Arctic Council and other national and international organizations. However, the conversation needs shift to the development of multilateral approaches to governing the arctic waterspace management to increase stability and stability. Developing a multilateral approach does require the Arctic nations to soften some of their positions on sovereignty and increase their willingness to work with and depend on other nations. This is not to suggest that the countries abandon their economic claims, but rather that they collaborate on improving Arctic nations' ships and aircraft operation in and near other's space, the sharing of

⁵Source: [Arctic Nations Gross Domestic Product information 2000 to 2012 derived from World Bank county data] World Bank, <http://data.worldbank.org/country>, accessed January 12 2013.

⁶International Monetary Fund, "2013 World Economic Outlook (WEO), Hopes, Realities and Risks." (PDF file) downloaded from <http://www.imf.org/external/pubs/ft/weo/2013/01/>. Accessed January 18, 2014.

⁷Collin Eaton, "Shell Recommends Science for Arctic Headaches," *Fuel Fix*(blog), February 10, 2014, <http://fuelfix.com/blog/2014/02/10/shell-recommends-science-for-arctic-headaches/>. Accessed February 11, 2014

resources, and how to improve information exchange. They need to develop multilateral agreements to support incident responses and the sharing of shipping and weather information in their territories.

Infrastructure: The Arctic nations need to start now in developing the infrastructure to support increased use of the Arctic waterspace. Priorities include improving navigation and communication systems, developing or expanding search and rescue, humanitarian assistance or disaster relief command centers, and creation of networked maritime domain awareness fusion centers encircling Arctic. Finally, the nations need to develop and exercise the techniques and procedures to respond to a crisis. Those countries that have taken steps to develop their approaches to governing their portion of the Arctic did so unilaterally. Working together can resolve unnecessary duplication of effort as well as identify the best geographic locations to support operations in the Arctic. The ability to share information, lessons learned, and rapidly communicate will result in an Arctic where ships, aircraft and businesses can exchange ideas, lessons learned, and the best practices to reduce risk and encourage development and trade.

Capabilities: Any effort to create a stable Arctic requires platforms and systems that are able to operate in an Arctic environment. The Arctic requires the development of platforms to provide maritime domain awareness, incident response, and support year round maritime operations in a very austere environment. Unmanned sensors and vehicles are ideal to support maritime awareness and support civilian operations in the region. The environment creates some operational and technological challenges for counties and industry to overcome, but collaboration between governments and industry can overcome the obstacles.

Conclusion

The nations in the Arctic are at a critical juncture. Decisions made now will set the path for the region's development and overall regional stability. All the Arctic nations state that international cooperation is critical. It makes sense from an economic and capability perspective to adopt a shared approach to reduce risk. Otherwise, all the countries will execute autonomous strategies, which have a greater likelihood of creating economic and political conflict. Working cooperatively to ensure stability in the Arctic is an extension of how counties are becoming more and more economically, socially and politically integrated and creates interdependencies that enable development of the region that is advantageous to the entire international community. The time is now for the Arctic nations countries to adopt a common solution to develop the authorities, infrastructure, and capabilities to support a common trade space in the Arctic.

PANEL 4: SHRINKING ICE CAPS, SHORTER SEA ROUTES, AND TRADE

CHINA AND THE ARCTIC: BUSINESS AND BEYOND

Professor Kai Sun
Ocean University of China

China's interest and participation in Arctic affairs has been growing with the melting of the Arctic sea ice, which has come as a result of global climate change. In this paper, the recent surge of China's Arctic interests, including academic research interests by social and natural scientists, business interests and political interests (mainly manifested by the open discussion of several Chinese officials on Arctic issues). The paper also discusses China's interest and participation in the Arctic and as the paper closes, challenges and possibilities for China's future Arctic participation are discussed.

Academic and Business interest in the Arctic

China's interest in the Arctic has grown in the past two decades, and this interest is only expected to increase in coming decades. China's primary interests in the Arctic are not only in "real-world" practice, which includes the economic interests and business opportunities of a changing Arctic, but also in academia, with more research projects on Arctic social and natural sciences, and more publications in academic journals.

In recent years, there has been an increase in Chinese writings on Arctic affairs from the social science perspective. To some degree, this growing academic interest also reflects the growing interest of Arctic issues from the Chinese government. The rise of China's academic interest in Arctic affairs is also shown through its institutional building in the past two to three years.

Both Arctic studies and "Russia's Arctic Policy and Its Regional Impacts" are among the funding agency's 2012 suggested project topics, and Arctic studies is also among the fund's suggested project topics in 2013. China's State Oceanic Administration is another major source of funding, with a Polar Strategic Fund set up in 2006, which provides funds for natural science and social science polar research projects. In recent years, the funded projects include more research from social science disciplines.

The melting of the Arctic and the opening of Arctic passages and resources have also attracted quite a lot of interest among Chinese businessmen. The most significant headline-maker is billionaire Huang Nubo, a Chinese real estate developer, and his investment plan in Iceland, which is ongoing. Huang's investment in Iceland — the purchase of a 300-km square area in Iceland for a tourist resort, including a luxury tourist centre with a golf course, villas and other attractions — was first announced in September 2011. The original plan has met with difficulties from Icelandic Parliament and was changed from a land purchase into a land rental agreement for 99 years' development. Huang was expected to sign the contract in October 2012; however, this changed plan was thwarted again by Icelandic officials in late 2012.

As David Wright states, "China is quite aware of the U.S. Geological Survey's estimates that '25% of the world's undiscovered hydrocarbon resources are found there, along with 9% of the world's coal and other economically critical minerals.'" So property development opportunities, such as that envisioned by Huang Nubo, are but one kind of opportunity that the opening Arctic can offer to Chinese companies. Beyond tourism, there are significant opportunities to develop Arctic resources in partnership with companies from Arctic countries. China's state-run oil companies are pioneering in this regard, joining the bids for Arctic resource development and investing strategically in Arctic resources.

Why China Looks North: The Arctic and China

China is joining the Arctic play for basically three reasons: out of environmental concern, (as a "near Arctic state," China may be impacted by Arctic climate change, necessitating research); economic opportunities, as the opening of Arctic passages offers great financial opportunity; and better Arctic governance.

(1) Arctic Environmental Changes and China

China is located in the northern hemisphere, with its far north close to 50 degrees north latitude, and thus defines itself as a "near Arctic state." According to a report by the Intergovernmental Panel on Climate Change, global warming in the Arctic is accelerating at a rate two times faster than the rest of

the world, and its environmental changes might negatively impact the rest of the world, especially countries in the northern hemisphere, so China is concerned with the impacts that such warming might have on it. And it seems that China is itself experiencing some climate change impacts, for example, the early 2013 cold weather and snowstorm in China, some scientists say, are related to environmental changes and sea ice loss in the Arctic. As China relies heavily on agricultural production, a warming Arctic is also expected to impact that sector of the economy. As Chen Lianzeng, deputy head of China's State Oceanic Administration has said, "As the largest developing country located in the Northern Hemisphere, the climatic and environmental changes in the Arctic will have a profound effect on the climate and environment in China, and directly relate to Chinese industry, agriculture and people's living. Therefore, the conduct of scientific research and expectation on the Arctic has significant meaning to China and its sustainable development."

(2) Arctic Passages and China

As the largest exporter and second-largest importer of global shipped goods, China relies heavily on sea lanes. The prospect of the opening Arctic passages is the most attractive reason for China's coming to the Arctic. The benefits of the Arctic passages are fourfold:

- ♦ The shortened distance. Arctic passages are nearly 2,000–3,500 nautical miles shorter than the customary sea routes from Chinese coastal ports to the east coast of North America, and reduce the length of customary routes from ports north of Shanghai to the ports of western Europe, the North Sea and the Baltic Sea by 25 to 55 percent.
- ♦ The reduced cost. By using the Arctic passages, it is estimated that the cost of Chinese international trade will be reduced by US\$53.3 billion to US\$127.4 billion yearly.
- ♦ The commercial use of the Arctic passages will put China much closer to Arctic resources and make China's use of them more feasible.
- ♦ The ports in northern China will benefit enormously from the opening of the Arctic passages, because a greater volume of goods will be transported through these ports.

(3) Arctic Resources and China

As one of the world's fastest-growing and biggest developing countries, there is no doubt that China needs more energy and resources for its future development, and a large part of them will be imported from abroad. The Arctic contains up to 30 percent of the world's undiscovered gas and about 13 percent of the world's undiscovered oil resources. The region also contains large amounts of chromium, coal, copper, diamonds, gold, lead, manganese, nickel, rare earths, silver, titanium, tungsten and zinc. China is diversifying its energy sources, and the opening of the Arctic offers more possibility of providing resources. Commentators agree that Arctic minerals are China's new strategic target. There is no doubt that for China, gaining access to Arctic resources — which, according to estimates are mostly located within the exclusive economic zones of Arctic coastal states — will require cooperation with the Arctic countries to gain access to those resources. Chinese companies are seeking opportunities with both Russian oil tycoons in developing Russia oil in the Arctic region and with Canadian oil companies, as well.

Conclusion

For China in the Arctic, business interests overshadows other interests in the Arctic in the near term, those including investments, resources, tourism, and shipping. With the melting of the Arctic, and Arctic passages and resources becoming more accessible, it is natural for China to look to the Arctic for economic opportunities. As some high profile Chinese officials commented publicly, cooperation with countries and business partners in the Arctic states is the only way for China to realize its interests in the Arctic.

PANEL 4: SHRINKING ICE CAPS, SHORTER SEA ROUTES, AND TRADE

THE ARCTIC AS A PATHWAY FOR GLOBAL COMMERCE: RUSSIAN GOVERNMENT AND INDUSTRY SHIPPING VIEWS

Dr. Katarzyna Zysk
Norwegian Defence University College

Development of the Northern Sea Route (NSR)¹ is one of the fundamental goals in Russia's Arctic strategy. The Russian government has high ambitions for the route, both as a stimulus to regional development and a major shipping artery to challenge traditional trade lanes between Europe and Asia. The state's approach, however, is not free of contradiction or conflict with commercial interests. This brief analysis presents 1) major development trends on the NSR, 2) Russian government plans and policies, and 3) the views of state and commercial industrial actors, primary shipping companies.

1. Major development trends

Transit and other forms of traffic on the NSR have increased systematically since 2009, when two cargo ships sailed through the passage, and 2010, when four did. The next year, the increase was relatively sharp: 34 ships sailed the NSR in 2011, followed by 46 in 2012 and 71 in 2013. In total, 1.2 million tons of cargo were transported in the transit passages in 2012 and 1.35 million tons in 2013, serving ports in Canada, the Netherlands, Poland, Finland, China, Japan, South Korea, Taiwan and other countries. In total, Russia issued 635 permits for transit and destination shipping along the NSR in 2013, with total transport volume of approximately 4 million tons. The transit cargo was dominated by petroleum products, ahead of bulk iron ore, coal, forestry products and fish.

The Russian government estimates a potential increase of cargo transport to around 64 million tons by 2020 and 85 million tons by 2030. More subdued estimates by Sovcomflot (a state-owned maritime shipping company) and Atomflot (a state agency in charge of nuclear-powered icebreakers) suggest an increase to 6-9 million tons per year in this decade, with the final amount determined by the market.

The significantly varying estimates indicate that future development trends remain highly uncertain. How much of the cargo will be foreign, and how much will transit the entire route, as compared to destination cargo (bound to or from the Arctic), remains unclear as well. Most experts agree, however, that the NSR will not be so attractive that it challenges current global trade routes. Hence, the short- and medium-term implications for major regional hub ports, such as Singapore, are unlikely to be significant.

Still, the Russian actors fully expect that traffic in the Arctic in general, and on the NSR in particular, will continue growing. As of today, Russian oil and gas interests dominate planning efforts, with a focus on creating favorable conditions for export of resources from the Russian Arctic to European and Asian markets. In fact, the viability and future of many Russian energy projects in the Arctic depend on the NSR. Much of the expensive state presence is created to accommodate that interests and transform the Arctic into Russia's foremost base for natural resources by 2020.

Consequently, the development of the NSR and further increases in shipping activity depend in large part on the amount of Arctic energy and mineral resources the region will produce. Oil prices are another major factor, and it is an open question whether they will justify the expensive state investments made in the region. In broader sense, the volume of shipping will depend on Russia's continued interest in expensive Arctic development as well as resource availability and national economic performance. Domestic political developments and foreign relations will also affect the projects, including access of international users to the shipping channel.

While the notion of transforming the NSR into a Suez of the north is conspicuous in high-level rhetoric, it does not appear as the primary goal of Russian policies. Some measures taken by the Russian government even appear counter to such an objective. For instance, a law now under development

¹ The NSR is not a single shipping channel, but a series of different shipping lanes of various lengths, depending on ice conditions, stretching up to 3,000 miles (4,800 km) from Novaya Zemlya to the Bering Strait along the Russian northern coast. It gives 35–60 per cent savings in distance for ships travelling between Europe and Far East.

proposes giving priority in the NSR to Russian vessels, which are to account for “not less than 70 per cent” of the cargo volume. While Russia’s attempt to secure its own industrial interests is understandable, such measures may hamper the NSR’s rise in the global maritime transport network.

2. Russian government plans and actions

In order to make Arctic shipping easier and safer, Russia has ordered a large-scale plan for revitalization of the maritime passage using political, legislative, economic means as well as security and military assets. Indeed, the civilian and military aspects of the Russian Arctic strategy are closely intertwined. Strengthening Arctic safety and security is seen as important both from a commercial development perspective and that of traditional security. While international use of the NSR is broadly publicized to attract foreign users, sovereign state control of the route is a key Russian priority, and that includes the right to deny access.

In 2012 and 2013, president Putin signed into law new amendments to clarify and strengthen NSR merchant shipping rules. The new laws clarified limitations on the admittance of vessels, defined the passage’s legal status and boundaries and set up an administration to manage practical tasks connected to traffic. Users have to abide by a number of rules, including applying and waiting for permission to use the NSR, paying icebreaker fees, coordinating journeys and conforming to radio communications and environmental security standards.

The modernization plans include the creation, by 2017, of a comprehensive coastal defense infrastructure with both military and civilian purposes. The plans aim at infrastructure enhancements for navigation and communication, modernizing railways, roads and harbors, as well as creating rescue service assets along the NSR. An important part of the Russian plans is a new generation of nuclear-powered icebreakers, the first of which is under construction with two more to follow. These assets are key to maintain the navigation along the NSR. The vessels are awaited with impatience, as Russia's aging fleet now includes only four active nuclear-powered icebreakers to cover the entire NSR. Only one or two of them will remain in active duty in 2020.

The Russian military presence in the region has increased in proportion to the perceived levels of international attention and activity as well as the large scale of modernization taking place in the Russian armed forces, in particular since 2008. The coast guard, border guard, customs, special forces and navy are all being reinforced to give the Russian regulations teeth. The catalogue of planned improvements includes dozens of special ice-strengthened vessels for emergency response and patrol ships for the navy, stronger surveillance and early warning systems, aerospace defense units and the reopening of a network of Soviet-era airfields in the Arctic. By the end of 2014, Russia aims to create a new Arctic military command to cover most of the military forces in the region and thus “protect its interests in the Arctic”. The Russian military presence is likely to increase further.

3. State and commercial industrial actors’ views

A number of Russian state and commercial industrial actors present in the Arctic, including shipping and oil and gas companies, agree that the NSR should not be viewed as competing with the Suez Canal, despite the relatively rapid growth of traffic in recent years. However, they see the maritime channel as having great potential. State shipping companies often cite the substantial cost savings from cutting travel distance and sailing days as a major argument in the NSR’s favor.

Still, they also list a number of obstacles to its development. There are also conflicting interests between the state and commercial actors. For instance, the transport route and fleet bureaucracies, including Atomflot and the Ministry of Transport, view the increased interest in the NSR as a harbinger of significant income. The funds generated could be used to maintain the icebreaker fleet, which is costly to build and operate, and to meet other infrastructure needs in the region. The shipping companies, for their part, unsurprisingly want to keep icebreaker, navigation, and security charges to a minimum. Actors like the semi-commercial Murmansk Shipping Company are concerned that the government regulations of 2013 may reduce profitability by increasing already high icebreaker fees. Other private companies are developing their own fleet of ice-class vessels.

Innovative technological solutions in combination with other favorable conditions are seen as a potential game changer in increasing the volume of cargo transported along the NSR. Russian users are examining various types of hull construction that could be suitable for the route. New ideas, such as those

developed by the Finnish engineering company Aker Arctic Technology, are of particular interests as an alternative way to ship through ice. Innovative approaches include a double-acting design concept permitting a ship to travel bow-first in open water and stern-first in ice, and thus to be more independent and cost-efficient. New types of icebreakers that can create a water channel twice the width of a traditional icebreaker while consuming less fuel are other possibilities. But research, design, experimentation, will require time.

The fact that Russian actors turn abroad for innovative arctic shipping technology points to another crucial constraint in the development of Arctic shipping. Representatives of the Russian oil and gas companies complain that the state of the Russian domestic shipping industry hampers general development in the Arctic. They say their activities are restricted and slowed by problems in producing specialized Arctic technology and delivering it on time for a reasonable price in comparison with foreign products.

Some private actors in the shipping industry expect the NSR's appeal to increase as the Arctic climate continues to undergo change, with the sailing season expected to lengthen to eight months from the current five. However, a substantial number of Russian government officials and influential experts, including some inside the state shipping companies, see the climatic changes as cyclical and therefore temporary in character. This is a popular view in Russia. One scenario often promulgated is that a cooling of the climate will begin returning (along with the Arctic ice) in 2015-2020, with a peak chill in 2030-40 and a new warming period starting in the mid-2060s. According the experts, Russia must prepare its Arctic activities for both the warmer and cooler periods.

PANEL 5: NGOs IN THE MARITIME DOMAIN

NGOs: A PRESENCE AT SEA WITHOUT LEAVING SHORE

Ms. Jordan Diamond
Environmental Law Institute

The emergence of new technologies and systems has accelerated man's ability to navigate and utilize the marine environment. From the steam engines that expanded deep water fishing to the nuclear submarines that allow exploration of ocean depths, technological development has transformed our relationship with the ocean. These changes are being incorporated across sectors, from science to commercial development to military activities, and by all entities, both governmental and nongovernmental.

Nongovernmental organizations have long played a role in the development and implementation of regional, national, and international efforts to protect and conserve the marine environment. This has largely taken place on land, as NGOs have generally lacked at-sea resources and capabilities. But recent years have witnessed a shift. NGOs have grown their physical at-sea presence. They have also, amidst the proliferation of new technologies, explored ways to grow their remote ocean presence without actually leaving the shore.

In an era of GPS, satellite imaging, and immense digital storage capacity, nongovernmental bodies are following similar pathways as governmental and academic institutions and exploring tools to support remote monitoring. They are growing partnerships with seaborne industry to develop traceability systems that support greater transparency and collaborative research efforts that support a better understanding of the marine environment. And they are making use of private ocean vessels and users, developing crowd-sourcing technologies to support regional monitoring and assessment efforts. These are but a few of the nascent but growing avenues through which NGOs and other entities are exploring expansion of their ocean presence.

Simultaneously, NGO efforts at-sea are felt through their engagement in international ocean governance. Their role at the international level, however, varies widely depending on the governance issue and forum. Some international entities invite participation from nongovernmental bodies by providing for observer or consultative status. Others invite partnerships, informally or formally, or inclusion on working groups or subcommittees. The dynamics and permissions vary significantly, as does seeming interest and engagement from the NGO sector.

Amidst the continuing proliferation of technology, NGOs are growing their capacity to engage at-sea both physically and remotely. They are also continuing to engage in international governance fora, which are shifting paradigms to develop mechanisms to include non-state actors in various capacities. We are seeing the emergence of partnerships that cross sectors and boundaries in furtherance of better information and better management. These new developments and new approaches raise questions about how existing dynamics will adapt.

PANEL 5: NGOs IN THE MARITIME DOMAIN

SINKING THE GAZA FLOTILLA

Dr. Nitsana Darshan-Leitner
Shurat HaDin – Israel Law Center

Background

In June 2010, Islamic extremists from Turkey and anti-Israel NGO's joined forces to organize a naval flotilla seeking to violate Israel's coastal blockade of the Hamas controlled Gaza Strip. The terrorists' mid-sea confrontation with the IDF resulted in the deaths of nine armed militants, serious injury to numerous Israeli soldiers and widespread condemnation of Israel and the IDF.

The same groups were again planning to breach the Gaza blockade in June 2011 in the hopes of provoking another massive public confrontation with the IDF. On June 12, 2011, boats loaded with contraband and up to 1,000 passengers were prepared to set sail to Gaza from Greece, Turkey, France, Ireland and Cyprus. In addition to the threat of a repeat violent confrontation with IDF soldiers, there was a real concern that weapons, money and other contraband would be smuggled on the boats to Hamas terrorists in the Hamas controlled Gaza Strip. Hamas is designated as a terrorist group by the U.S., the UK, Israel and the European Union.

The Legal Regime

Israeli Naval Blockade of Gaza: The Gaza Strip is subject to an Israeli naval blockade which is a legally permissible step in line with international law. Specifically, in the Oslo Accords, the Palestinians agreed that the Gaza coastline would be placed under Israeli control and that no foreign ships would be allowed closer than 12 nautical miles from the shore.

Laws Prohibiting Support for Terrorists: U.S. criminal statutes prohibit the provision of material support for acts of violence and terrorism (18 U.S.C. § 2339A and § 2339B) and the provision of material support for naval expeditions against U.S. allies (18 U.S.C. § 960 and § 962). These statutory provisions can also be the basis for civil liability for any damages or harm resulting from violations thereof. In addition, the UK and the EU have terrorist-financing laws which prohibit and criminalize the provision financial or other economic resources to or for the benefit of designated terrorist entities, such as Hamas.

Shurat HaDin's Actions to Stop the June 2011 Flotilla

Commencing several months before the planned flotilla, Shurat HaDin took several legal steps to ensure that the flotilla would not set sail and to prevent any unnecessary violence.

Warning Letters to Maritime Insurance Companies

May 16, 2011 - A ship is not permitted to set sail without insurance. The maritime insurance companies insuring the boats utilized by the Gaza Flotilla were not aware that the passenger boats they were indemnifying were being used by the organizers to breach the coastal blockade, violently challenge the IDF and smuggle weapons into Gaza. As such, Shurat HaDin sent warning letters placing the maritime insurance companies on notice that if they knowingly provided insurance, they would find themselves legally liable for any future terrorist or rocket attacks perpetrated by Hamas, given that the boats provide material resources to Hamas. Several of the companies, including Lloyds of London, responded that they would not insure the Flotilla boats given the information provided in our warning letters.

Proceedings Against Inmarsat

June 6, 2011 - Inmarsat, based in the UK and the U.S., is the main provider of maritime communication services, a crucial tool which enables vessels to reach their destinations. After sending a warning letter to Inmarsat for aiding and abetting terror organization, Shurat HaDin commenced a civil action against Inmarsat in Florida State Court on behalf of Michelle Fendel, a resident of the Southern Israeli town of Sderot. Among other things, the lawsuit sought a permanent injunction against Inmarsat which would

require it to cease provision of all services to any Flotilla ship on the grounds that the provision of such services constituted aiding and abetting terrorism in violation of U.S. law.

Cutting Edge Lawsuit in Manhattan Federal Court

June 17, 2011 - Shurat HaDin filed a lawsuit in New York Federal Court to seize the ships used in the flotilla. The lawsuit was filed on behalf of Dr. Alan Bauer, a U.S. citizen who was seriously injured in a Palestinian terror attack in March 2002. The lawsuit contended that the ships were outfitted with funds unlawfully raised in the United States and that furnishing funds to be used for hostilities against a U.S. ally violates a rarely-utilized “informant” statute that allows a plaintiff/informant to seize such property (18 U.S.C. § 962).

Complaint to the Greek Coast Guard

June 30, 2011 - Following up on its warning letters to the insurance companies and to Inmarsat, Shurat HaDin approached the Ministry of Civil Protection in Greece, notified them regarding the illegality of the boats participating in the Flotilla and demanded that the Greek Coast Guard conduct thorough regulatory inspections of all boats to ensure that they possessed proper insurance and registration.

Lobbying Efforts

June 30, 2011 - Shurat HaDin contacted Texas Governor Rick Perry, alerting him to the criminal activity being perpetrated in the U.S. by the Flotilla organizers against America’s closest Middle Eastern ally and asking him to take legal action. Governor Rick Perry wrote to Attorney General Holder demanding that the Flotilla organizers be aggressively pursued for violating the Neutrality Act, and that action be taken against Inmarsat. By attempting to breach the Naval Blockade around Israel and deliver support and resources to the Hamas government, the anti-Israel anarchists brazenly violated numerous provisions of the U.S. penal code designed to ensure that U.S. citizens do not engage in hostile campaigns against U.S. allies.

Success

On July 5, 2011, after the self-imposed Flotilla deadline expired, international campaigners began to return home, citing various bureaucratic issues, including lack of insurance, and blaming Shurat HaDin for their difficulties.

Shurat HaDin – Israel Law Center, an Israeli civil rights organization, is a world leader in the fight against terror funding using legal action and civil lawsuits on behalf of terror victims. To date Shurat HaDin succeeded in winning \$ 1 B in judgments against terror groups and states sponsor terrorism, and collected over \$120 M in actual payments to the terror victims.

PANEL 5: NGOs IN THE MARITIME DOMAIN

PARA-NAVIES IN THE 21ST CENTURY

Mr. Claude Berube
U.S. Naval Academy

The West's budget choices of larger domestic programs at the cost of reducing its navies will have a cost to global and regional stability beyond potential conflicts with peer competitors. Greater maritime security gaps will emerge. Non-state actors and non-governmental actors will identify opportunities for illicit activities due destabilized states, seek to remedy perceived inactions by states, or pursue actions that change and challenge policies.

Historically, the U.S. Navy has intervened in more non-state conflicts or crises involving populations than state on state conflicts. The last decade has again reminded us that irregular warfare can be every bit as challenging and deadly as conventional wars, even in the maritime setting. Al-Qaeda in the Arabian Peninsula (AQAP), Somali pirates, and Lebanese Hezbollah each has at least some capability to counter the U.S. Navy and its partners at sea. Maritime non-state actors wreaking havoc on the ocean are nothing new. Pirates in particular have menaced merchants and navies around the world for hundreds of years. Super-empowerment to individuals and organizations due to advancing commercially-available technology will allow para-navies to emerge and evolve.

Characteristics and Issues

1. Para-navies are employing maritime platforms like ships, submarines and UAVs, to achieve their objectives.
2. Para-navies have been but should not be underestimated. The clearest example is ignoring a threat or challenge on how these para-navies might recruit, behave or evolve.
3. The goals, operations, and tactics of para-navies are diverse but some common traits can provide guidance in studying more malevolent unconventional forces and non-state actors.
4. Information operations have become central to the strategies of several para-navies.
5. Funding for para-navies has been derived through legitimate means whether they are through formal business contracts (in the case of PMSC) or contributions (Sea Shepherd and Women on Waves.)
6. Para-navies border on realm of legitimate activity or at least laws, regulations, and policies that have not yet been clearly defined.

Case Studies

Private Maritime Security Companies: PMSCs are likely to increase in the 21st century because they are market-driven with states and businesses like shipping companies providing opportunities for these firms. Modern PMSCs grew out of a response to Somali pirate attacks in the Horn of Africa. Some companies began to offer enhanced protection with the use of escort vessels. Other firms attempted to enter the market and built up their virtual presence through broad public relations campaigns but the press releases tended to be their only offering. Several made wild claims about already having a fleet of a dozen or more vessels. PMSC para-navies largely diminished as the threat of Somali piracy decreased in the past two years, some firms continue to offer sea-based logistics platforms in the Indian Ocean for support of security guards.

Individual states may consider outsourcing some secondary or tertiary naval missions. While the threat of piracy may not expand the industry, other challenges such as illegal fishing in territorial waters of states without security platforms will be a likely future market as well as the protection of off-shore oil and gas platforms. States and international organizations will have to ensure that the company offering security services has the people, qualifications, and assets it advertises. There is a danger that PMSC para-navies will move beyond self-defense and security forces and used instead for potential offensive operations and illegal activities.

Environmental Activists: Although Greenpeace has had ships, no environmentally-oriented para-navy has been as successful as the Sea Shepherd Conservation Society. No para-navy better represents the gray area between legal and criminal activity since it has endangered other ships engaged in whaling; in one case they were charged with piracy by boarding another ship and the group uses a variant of the skull and bones as its logo and flag.

Sea Shepherds are experienced in seaborne operations and have been fairly effective in their mission to save marine life. Although their campaigns to protect whales against Japanese whaling fleet have been their most famous operations, the organization acts at several other fisheries and marine mammals around the globe, including blue-fin tuna in the Mediterranean, dolphins in Japan, seals in Canada, and sharks in the Galapagos. Greenpeace, the Sea Shepherds' older, but slightly more docile sister organization, has also engaged in aggressive tactics throughout its history. These deliberate acts are designed primarily to draw attention to a cause. In some cases, they are meant to invoke an intentional reaction, or better still, over-reaction, by corporate entities or maritime law enforcement agencies, coast guards, or navies.

Sea Shepherd is renowned for controversial and dangerous tactics like ship boardings and rammings, but less known for their partnerships with international law enforcement organizations. Likewise, it is not uncommon for terrorist and insurgent groups to conduct humanitarian operations to win popular support in conjunction with more violent activities.

Policy Advocates: Women on Waves (WoW) is a Dutch-based non-profit organization founded by a physician who previously served aboard a Greenpeace ship. WoW views itself as advocating for women's human rights by increasing education about reproductive rights and providing abortion services in a maritime environment. Initially the founder "imagined an entire fleet of floating clinics...[that] would anchor in international waters, carry out abortions, distribute medication and train local staff." WoW developed a mobile treatment room, also called the A-Portable, an 8'x 20' standard container that could easily be placed on a boat.

Unlike Sea Shepherd, WoW does not use any kinetic action but rather uses maritime platforms because "ships are the visual," and provide an essential component to their public relations campaigns. They have also proved adaptable in their campaigns as they shifted their boat leases from larger ships to sailboats whose crew did not have the same credential requirements, thereby drawing in a broader array of volunteers. Campaign-driven leased boats reduced their costs and provided flexibility in the platforms.

Conclusions

Examining para-navy goals, strategies, platforms, and tactics is worthwhile because it shares traits with other NSAs and its own unique characteristics could be incorporated by future MNSAs. Understanding the irregular challenges they pose can help the United States Navy and Coast Guard and their international partners in responding to similarly-structured MNSAs in the future.

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U.S. NAVAL WAR COLLEGE
Est. 1884
NEWPORT, RHODE ISLAND

*686 Cushing Road
Newport, Rhode Island 02841*

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